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THE YACHTSMAN'S PILOT

E. KEBLE CHATTERTON

21



THE YACHTSMAN'S PILOT

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THE YACHTSMAN'S PILOT

TO THE HARBOURS OF ENGLAND,
WALES, SCOTLAND, IRELAND; &
THE CONTINENT OF EUROPE
FROM YMUIDEN TO BORDEAUX;
BORDEAUX TO SETE BY INLAND
WATERS; THE MEDITERRANEAN
HARBOURS FROM SÈTE TO
TOULON; THE RIVIERA HAR-
BOURS TO THE GULF OF GENOA;
WITH NOTES ON THE ITALIAN
HARBOURS FROM GENOA TO
NAPLES

Edward By
E. KEBLE CHATTERTON

ILLUSTRATED WITH 52 HARBOUR PLANS

(THIRD REVISED AND CONSIDERABLY ENLARGED EDITION)



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PREFACE TO THE THIRD EDITION

1-2-57 THE demand having been made for a third edition of *The Yachtsman's Pilot*, I have again been able to make revisions in order to bring the existing chapters up to date. So many yachtsmen from northern Europe now visit the Riviera in their own craft that I have thought well to add an additional chapter with a new set of foreign Harbour Plans. Practically every port and haven in France likely to be visited will now be found within the pages of this book, and the cruising man is able to see from the following fifteen chapters just that essential information which he may require before entering a strange anchorage.

The area now covered is from the Orkneys in the North to Naples in the South ; from the West of Ireland to Amsterdam in the East. The number of Harbour Plans has been further increased. It is hoped to maintain *The Yachtsman's Pilot* in an up-to-date condition, and I shall still continue to welcome any additional data which readers may care to send.

I would like to use this opportunity for expressing gratitude to many yachtsmen who have publicly and privately shown their appreciation of the previous editions ; as also to thank them for giving me many valuable items concerning their own familiar waters.

E. KEBLE CHATTERTON.

PREFACE

THIS volume, which is based on nearly forty years of experience in Home and Continental waters, is here put forward with the hope that it may be of real practical service to yachtsmen, and especially to owners of small tonnage.

The aim has been to eliminate all superfluities and to give the reader just those essential facts which, as a stranger entering a port, he particularly desires. For example, he wishes to know exactly where to bring up, what are the traps for the unwary, where he can get stores, what is the time of high water based on Dover, and so on. How often does one see a stranger entering such ports as Ostende or Torquay quite bewildered because lacking clear and precise information as to where the best berths exist !

The area covered comprises the harbours of the United Kingdom, Ireland, and the European continent from Ymuiden along the coasts of Holland, Belgium, and France to Bordeaux. The harbour plans are meant to *supplement* the largest scale charts, which should be on board. All bearings and courses given are Magnetic, unless otherwise stated.

It should be added that a part of this book appeared week by week in *The Field*, and that in answer to the requests of readers the whole has been issued in book form, but after revision and considerable extension so as to include every likely cruising area. If any errors should have crept in, a notification will be greatly appreciated in order that they may be rectified in the next edition.

E. KEBLE CHATTERTON.

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Except where stated otherwise, the time of High Water is based on Dover.

The following abbreviations are used in these pages :

H.W.D. = High Water Dover.

L.W.D. = Low Water Dover.

H.W.S. = High Water Spring Tides.

L.W.S. = Low Water Spring Tides.

H.W. or L.W. (simply) refers to local High or Low Water.

In the Harbour Plans all soundings have been intentionally omitted, the object being to obtain clearness and simplicity ; whilst stressing essentials respecting the entrance, appearance from seaward, where to bring up, etc.

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THE YACHTSMAN'S PILOT

CHAPTER I

FROM ST. ABB'S HEAD TO GREAT YARMOUTH

Eyemouth Harbour lies $3\frac{1}{2}$ miles south of St. Abb's Head and at the mouth of the River Eye. For high water add 3 hours 4 minutes to H.W.D. Springs rise 15 feet, Neaps rise 11 feet. This tidal harbour can easily be made at high water, but at L.W. Springs only 2 feet can be expected at the entrance. As in the case of many British harbours on the East Coast, a heavy sea breaks off the entrance during easterly gales.

After picking up St. Abb's Head, which has the appearance of an island, pass on either side of the Hurcars. If proceeding by the North Channel, keep over to the mainland shore so as to avoid the Inner Buss, a small sunken rock with 7 feet, and unmarked. Stand on till the harbour is well open, and then make for the entrance at sufficient rise of tide. There is then no difficulty.

The harbour is formed by the River Eye, which has a break-water projecting at about right angles to it on the NE side, and a short pier on its West side, but a little further up. Do not attempt entering whilst the fishing fleet is emerging. After heavy rains the freshets pour out strongly. Proceed up the long, narrow gut and secure to the SW corner of the narrow, central quay, where you are protected from the freshets. The bottom is soft mud. Fresh water is obtainable from the quay, and supplies can be purchased ashore.

Berwick-on-Tweed. This harbour is at the lower portion of the River Tweed. High water is at about the same time as Eyemouth. Springs and Neaps rise also as at Eyemouth. Not more than 4 feet at L.W. Springs can be expected on the bar. On entering, the NE (or starboard) side will be found to consist of a stone pier with lighthouse. The best time to enter is 1 hour before H.W. Do not attempt to come in on the ebb, especially after heavy rains. This harbour should be avoided in thick weather.

If coming from the North, give the shore a berth of a mile, keep well clear of the rocks, and do not alter course inwards until the harbour is well open. If approaching from the South, keep seaward of the bay until you are well clear of shoals. The two Inner Farne lights in line will lead clear of all shoals in Berwick Bay. In fine weather, and obliged to wait for rise of tide, get the lighthouse at end of Berwick Pier in line with spire of Berwick Town Hall, and anchor temporarily on these marks, which lead clear of all dangers in Berwick Bay. (The Town Hall spire is the largest in Berwick and has a clock.)

Approaching the harbour mouth, on a course about W by N (northerly), pass the lighthouse to starboard, thence follow the line of the pier at a distance of roughly 40 feet, but beware of rocks just inside the pier. From the elbow of the pier alter course to port, and leave a dolphin with barrel well to starboard. Now make for another dolphin (with triangle) on the North side, and leave it to starboard likewise. The river gradually sweeps round to NW and North. Steer for the black nun buoy off Carr Rock. To this mooring buoy you may secure at the bows, but run a stern rope to a ring on the jetty. You will find a depth here of 3 fathoms, or just under. On the Tweedmouth side there is a wet dock, having 10 feet. Gates open 1 hour before to 1 hour after H.W. Pilots come out from Berwick in answer to the usual signals. All stores, repairs, fuel, etc. Golf links. During the herring season expect to find this harbour somewhat crowded.

ST. ABB'S HEAD TO GREAT YARMOUTH 13

Holy Island, which lies 9 miles SSE of Berwick, is the ancient Lindisfarne and steeped in history. This picturesque island, less than 2 miles in area, possesses interesting ruins ; but it is especially convenient for small craft desiring a safe anchorage off the Northumberland coast. The harbour, which is at the SW end, is natural, small, and in the herring season somewhat crowded. Westerly gales rushing over the flats unimpeded make it advisable to have good ground tackle but in general there is capital shelter, with always not less than 7 to 8 feet of water on the bar. Add 3 hours 18 minutes to H.W.D. for local high water. Springs rise 15 feet, Neaps rise $11\frac{1}{2}$ feet. At half flood, which is a good time for entering, there should be about 15 feet over the bar.

In approaching from the North by the Goldstone Channel, you will see a red conical buoy which marks the Plough Seat Reef and must be left to starboard, whilst a black can buoy marks the Goldstone Reef. Having passed midway between these two buoys, carry on South (True) thus giving a wide berth to another red conical buoy off Castle Point. The Castle is a most prominent landmark to the NW of this buoy

When arriving from the South, keep the beacon of Plough Rock (which is 800 yards West of Plough Seat Reef) just open eastward of Emmanuel Head till you get the two obelisks on Old Law in one, when make for the harbour. The Plough Rock Beacon is a black wooden perch surmounted by a ball. The Old Law is a narrow sandy islet, at whose NW extremity are the two obelisks 83 feet and 73 feet high respectively, which will be made to bear about $W\frac{1}{2}N$ and will lead over the bar. Now look out for Heugh Beacon (a mast with a triangular top 80 feet high situated on a rocky eminence). When you get this beacon in line with the church belfry bearing about $NW\frac{3}{4}N$ alter course for the same, and proceed up harbour, anchoring under the Heugh in 2 fathoms. It is better to let go a second anchor if the prevailing westerly

wind is blowing at all fresh. The ebb tide runs at 4 knots during Springs in the Narrows.

Pilots are not necessary, but available. Drinking water from a well between the Castle and the village, which is now a summer resort. There is a Post Office and some simple stores may be obtained, but the butcher's cart calls only on Wednesdays and Saturdays, the island being joined to the mainland at low water.

North Sunderland (not to be confused with **Sunderland**) **Harbour** is an artificial haven which dries out. Its small area is enclosed by concrete piers, though the breakwater has become damaged. Yachts and fishing craft can lie aground, or anchor (with offshore wind) in 2 fathoms, sand, off the North Pier. Time of high water, and rise of tide as at Holy Island.

Craster is $1\frac{1}{2}$ miles south of the conspicuous Dunstanburgh Castle. Off Craster village are the two rocks Little Carr and Muckle Carr, which form a natural haven that is much used by the herring fleet. With offshore winds this is a convenient anchorage for a tide, but otherwise too exposed. Fresh water obtainable from the village. Rise and fall as at Holy Island. For high water add 3 hours 25 minutes to H.W.D.

Boulmer Haven, 2 miles North of Alnmouth, affords shelter for small craft in practically all winds, and is a most useful natural harbour in the case of approaching bad weather or fog, or oncoming night. This curious, unusual anchorage, measuring 800 feet by 200 feet, is enclosed by reefs. The bottom is clean sand, the depths are from 5 feet to 8 feet at low water, Springs, and the reefs ensure smooth water. Unlike many of the artificial harbours along this coast, Boulmer Haven may be entered even in heavy NE weather, and Scotch fishermen have long been accustomed to use it.

ST. ABB'S HEAD TO GREAT YARMOUTH 15

There is a strong flood which sets in till the reefs are covered, but the entrance demands only ordinary caution. The mouth is open to the NE and is 40 yards wide with 7 feet at L.W. Springs. On the shore will be seen two beacons with triangular topmarks 40 feet and 30 feet high respectively. Get these in line, and they will lead through the opening. They will be readily identified on low sandhills a quarter of a mile South of Boulmer village, and on a westerly bearing. A post placed on either side of the reef at the entrance will keep you away from the reefs.

Keep the sounding lead going, and bring up within as convenient, with one anchor at the stern and one at the bows—SW and NE—to prevent swinging. There is a Post Office, and fresh water can be obtained at the Inn.

Alnmouth can be used by yachts up to 6 feet draught, but the bar almost dries; the harbour should be entered at H.W., and not if there is a heavy swell. In fine weather whilst waiting for the tide, anchor at the North side of the bay in 3 fathoms, sand. To find high water add 3 hours 25 minutes to H.W.D. Springs rise $14\frac{1}{2}$ feet, Neaps 11 feet.

The bar shifts, so feel your way in cautiously with the lead, and the best water will most likely be found with the old Coastguard Station flagstaff in line with the chimney of the house behind, until you see the warping posts on either side of the river. Anchor about half a mile from the mouth at Pan Leazes. Alnmouth is only a village and a seaside resort, but fresh water, meat, and ordinary stores are available.

Warkworth Harbour is at the mouth of Coquet River, and there are 4 feet on the bar at L.W. Springs. For high water add 3 hours 47 minutes to H.W.D. Rise of tide approximately the same as at Alnmouth. Warkworth has a North and South stone breakwater, the entrance between being about 100 yards wide.

When approaching, pass the Pan Bush shoal on either side. When coming up from the South, strangers should go outside Coquet Island. Do not attempt this harbour in a NE gale. Whilst entering between the piers beware at Spring Tides of the flood setting strongly across the harbour mouth to the South. If the ebb is running, carry plenty of way on the ship. There is safe anchorage at the North Jetty in 8 feet. Pilots are available. There are boat-builders, engineers, all stores, fresh water, and Post Office.

Blyth Harbour lies 8 miles North of the Tyne and is suitable for yachts. The entrance is open to the South, between the East Pier and the old West Pier, but the southern portion of the latter has been demolished, except where it is kept as a training-wall. A new West Pier has been built westward of this pier. At least 20 feet will always be found in the entrance, but winds from S and SE send in a nasty joggle off the piers when the ebb is running out. This is the best harbour between the Firth of Forth and Great Yarmouth, the rise and fall being the same as at Alnmouth. For high water add 4 hours to H.W.D.

When approaching, leave to the southward a red conical light-and-bell buoy, which is moored half a mile SE of the entrance. Having passed within the piers, carry on up harbour keeping rather to the western side than in mid-channel, and at the North end of the West Pier turn to port into the basin known as the South Harbour. Make for the SE corner of the latter, and bring up between the centre jetty and the West Pier. Here you will always lie snug, out of the way, with the headquarters of the Northumberland Yacht Club at hand. Fresh water, repairs, engineers, and all stores are available. This harbour will be found far preferable to the less clean ports of the Tyne, Wear, Tees, and Hartlepool. If at all practicable, the passage between Blyth and the Humber should be made without calling elsewhere.

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The Tyne with its dirty waters and atmosphere, strong tides and busy commercial traffic, is quite unsuited for yachts. If compelled by circumstances to enter, look out on approach for Tynemouth Priory on the North shore. Next will be seen the long stone piers at either side of the entrance. The mouth is exposed to the East. For high water add $4\frac{1}{2}$ hours to H.W.D. Rise and fall of tide are the same as at Alnmouth. Beware of the strong ebb which knocks up a heavy sea at the mouth if an easterly wind is blowing. Small craft should not run for the Tyne during NE gales. At tide time, especially during the night hours, keep a smart look-out for other vessels. Anchor off the Herd Sand, i.e. on the South side, within the black can buoy as convenient with regard to draught. Here a yacht will be well out of tide and traffic, but the holding ground is not of the best and this anchorage is impossible during easterly winds. Otherwise go 2 miles up the river.

All stores and repairs, etc.

Sunderland. The coastline from the Tyne to the Tees is so characterised by chimneys, black smoke, and blast furnaces, that yachtsmen will not find Sunderland an attractive harbour. The River Wear's exit is protected by two curved breakwaters. When approaching from the North or South, pick up Souter Point and then sight these two piers. If coming from the South, leave the Hendon Rock black bell buoy (surmounted with staff and globe) to port. The entrance is easy, and the tides run true. Anchor inside the northern breakwater (known as Roker Pier) in 10 feet sand and gravel. But in fresh winds from SW or E, this berth is not too comfortable.

A more satisfactory course is to enter by the South Outlet, which lies about a mile South of the above Wear mouth. Enter the South Outlet between two straight breakwaters placed at right angles. The channel has not less than 12 feet,

and leads to Hendon Dock : but anchor close to these gates which are rarely opened. This is quite the best place. The time of high water, together with the rise of tides, is approximately the same as at Blyth. Every kind of stores and repairs available at Sunderland.

Seaham. Keep well off the coast until abreast of Seaham Harbour entrance, which faces SE and is not to be attempted in heavy onshore winds. There is a depth of 7 feet at L.W. Springs in the channel leading to the Docks. Keep fairly close to the East Pier, but be ready to check way quickly when once inside. Proceed into the North Dock, whose gates are open from 1 hour before to 1 hour after high water, and here you can lie afloat in 15 feet. High water occurs 20 minutes later than at Blyth, the rise of tide approximating to that at Alnmouth.

Hartlepool. There are two ports, of which the first is the dirtier :—

The Commissioners' Harbour is entered between the old pier and jetty. Bring up in the Victoria Dock, which can be negotiated at tide time, but beware of baffling winds when coming up harbour. The channel into the Commissioners' Harbour is marked by black conical buoys on the starboard hand, and by black and white can buoys to port.

The West Harbour is to the West of the above. Enter between the pierheads and be ready to check way.

The time of high water is approximately that at Seaham, the rise at Springs being 15 feet 6 inches and at Neaps 12 feet.

The River Tees. Yachtsmen should not use the Tees without special cause. Follow the buoys and beacons, but beware of hitting the training-walls after half flood. There is a wet dock at Middlesbrough. By night the glare from the

ST. ABB'S HEAD TO GREAT YARMOUTH 19

blast furnaces indicates this depressing locality. Spring tides rise 17 feet. Neaps rise 12 feet. For time of high water add $4\frac{1}{2}$ hours to H.W.D.

Whitby is not an ideal harbour for yachts, and should never be attempted in a NE gale, though it is preferable to Scarborough. Small craft should not make the passage between Spurn Head and Blyth except in settled weather. Do not make Whitby entrance unless between half flood and half ebb, when a ball will be seen hoisted on the West Pier to indicate there is a depth of at least 10 feet on the bar.

Having picked up the black bell buoy (surmounted by staff and globe), which is moored less than a mile to seaward of the East Pier, steer for the entrance, keeping midway between the two piers. Beware of the flood tide setting strongly to the eastward across the harbour mouth. It is difficult to come in against the ebb without auxiliary power. Keep within the buoys, leaving black to port and red to starboard. Hug the western shore, and alongside the Fish Quay on the western side there are at least 6 feet of water. This, however, should be used only as a temporary resting-place, being exposed to onshore winds. It is better to go above the swing bridge, which opens at high water, where mooring buoys and posts will be found. A depth of 7 feet is here available. Oil fuel and all provisions can be obtained ashore, and drinking water from the quay.

For high water add $4\frac{1}{2}$ hours to H.W.D. Springs rise 15 feet, Neaps $11\frac{1}{2}$ feet.

At night green lights indicate that the swing bridge is open, and red that it is shut. It was on Whitby rocks just off the harbour that the hospital ship *Rohilla* got wrecked during a NE gale at the end of October, 1914, with a heavy loss of life.

Robin Hood Bay. In fine weather, if waiting for the

tide, it is convenient to use this temporary anchorage and thus avoid going into Whitby or Scarborough. If the wind is northerly, anchor under the North Cheek : if southerly, under the South Cheek. But be ready to clear out quickly.

Scarborough. This is the worst harbour on the inhospitable Yorkshire coast, and should be avoided if possible. Whitby to the North, and Bridlington to the South will be found less objectionable. During heavy onshore weather it is safer to keep well out to sea rather than run for Scarborough. During the late summer it is crowded with the herring fleet. Heavy seas and strong winds must be expected during many days here of any normal yachting season.

In order to keep clear of dangers, especially when coming up from the South, give Scarborough Bay a good berth until the middle of the southern side of the West Pier bears NW by North. Enter on that bearing, the best time being between half flood and one hour of ebb. Keep slightly to starboard so as to pass fairly close to the East Pier, then anchor temporarily off Vincent Pier lighthouse, and row ashore for instructions as to berthing. Vincent Pier is V-shaped, and there is a depth of at least 12 feet off the pierhead when by day a white ball is hoisted on the mast, or by night 1 red light is shown.

Vincent Pier is joined to the Old Pier by a bridge. Both the East Harbour and Old Harbour dry out, and a visiting yacht will enter the East Harbour. Fresh water from the pier. Oil fuel and all provisions, and some ship's stores can be obtained ashore. For time of high water add 5 hours to H.W.D. Spring tides rise 16 feet, Neaps 13 feet.

It will be recollected that on December 16, 1914, Scarborough was shelled by a German squadron who laid a mine-field to the southward.

Filey Bay. At one period of the last century there was

a project of building here a large harbour, which would have been a considerable convenience for coasters. The sailing ship era having passed, and small steamers having taken their place, no such protection can be hoped for by yachts. But under the rocky ledge of Filey Brig may be found temporary anchorage with excellent holding ground as long as the wind is offshore. Here you will ride in comfort well out of the tide. But whenever the wind turns easterly, get under way. Avoid the race off the Brig. This Bay will be found very useful in case of a fog. There is a steady procession of traffic up and down the coast.

Bridlington is an artificial harbour and dries out. Enter on a sufficient rise of tide, turn to port, and berth alongside quay on port hand. During holiday time in the summer expect to find much coming and going of small craft. Be ready to stow sail quickly. When a red flag is hoisted at the North Pier head by day, or the light thereon by night shows red, there is a depth of at least 9 feet. This light turns green when there are not 9 feet. At H.W. Springs the depth in the harbour is from 9 to 10 feet. All ordinary stores and fuel available. For high water add $5\frac{1}{2}$ hours to H.W.D. Springs rise 16 feet 9 inches, Neaps 12 feet 9 inches.

River Humber. The brown, sandy-laden waters of the Humber are not attractive to every yachtsman. The tides here are unusually strong, the scenery is not beautiful, mists and fogs are frequent, and the river contains too many shoals. There is considerable traffic, including the fine steam trawlers of Grimsby and Hull. If the Humber is used only as a temporary stopping place on passage, it is not necessary always to go up so far as Grimsby for shelter. The holding ground abreast of the latter is not good. If bad weather threatens for a few days, a yacht should in that case certainly enter Grimsby outer harbour and then lock

in at tide time to the basin. But this is a somewhat dirty and depressing place, scarcely improved by the odour of fish manure. The lock gates are closed for four hours, i.e. two hours on either side of low water. During NE gales the outer harbour and the open lock are extremely lively, and a nasty scend surges. Have plenty of fendoffs ready, and avoid being crushed against the steel sides of trawlers. When once through the lock gates, there is perfect security. Every requirement can be met in regard to ship repairs, mechanical defects, ropes, fuel, etc.

But, ordinarily, it will suffice to bring up just inside the Humber at the back of Spurn Head. This spot is known as the North Channel and can be recommended in all but the heaviest weather, though even then it is tenable. It has the double advantage of being very conveniently placed for continuing the passage up or down the coast, but it is also out of the tide and traffic. During foggy weather small craft will find the North Channel a useful anchorage. In entering, keep the lead sounding, and avoid the spit to starboard as well as the shoals to port. The general trend becomes about NNE. Carry on past the Spurn Lighthouse, a circular tower 120 feet high painted black with white band, and the lifeboat will be seen lying at moorings. Let go anchor in 2 fathoms. Should heavy gales spring up, haul further up the Channel to the northward, where 10 feet should be found, though the depths are subject to variation.

For time of high water subtract $5\frac{1}{2}$ hours from H.W.D. Spring tides rise 20 feet, and Neaps $15\frac{1}{2}$ feet. At times the ebb runs at not less than 7 knots.

Boston. The Wash is a nasty part of the sea in which to be caught by bad weather, and it is advisable (if it can be done) to run for the above-mentioned shelter under Spurn, since no easy port exists in Lincolnshire or Norfolk until Great Yarmouth is reached. Tides in the Wash are both

strong and big at Springs, and there is the difficulty of picking up the low-lying coast in the frequent haze. The channels are subject to alteration owing to the shifting of sandbanks, and sometimes may even be closed with the buoys removed. It is therefore essential to have the very latest charts for this area.

Of the three channels leading to the approaches of Boston, the Wainfleet and the Parlour are at certain periods navigable and buoyed : in some months they are impracticable. The Freeman Channel lies between the Roger Sand and the Long Sand, the North side being marked by black conical buoys and the South side by black-and-white vertical striped can buoys. Thence proceed by the Lower Road in a south-westerly direction to the New Cut, which is well marked by black conical buoys to starboard. At Clay Hole, which is at the seaward end of the New Cut, wait till the young flood has made and there is a sufficient rise of water. This anchorage at Clay Hole is somewhat exposed to NE winds, but at least 2 fathoms will be found, and the pilot vessel has her station at this spot. A useful tide gauge on a beacon near the vessel indicates the amount of water over the sill of Boston Dock. The tide at Clay Hole floods for $5\frac{1}{2}$ hours and ebbs for $6\frac{1}{2}$ hours. The amount of water in the New Cut is influenced not merely by the moon but by other circumstances. A fresh NE wind after a period of rainy weather raises the depth several feet.

Carry on to Boston, where the wet dock can be entered through a lock. A square blue flag hoisted at the dock indicates that you may enter. The best time to arrive here is after half flood, when the strong tide (4 knots at Springs) has eased. For high water subtract 4 hours 45 minutes from H.W.D. Springs rise 21 feet 9 inches, Neaps 15 feet 6 inches. Repairs to hull and engine ; fuel ; and all requirements can be obtained at Boston. A yacht of 5 feet draught can reach Lincoln, Gainsborough, the Trent, and even the

Humber through Boston, but several locks will have to be negotiated.

Sutton Bridge. After picking up the Bar Flat buoy (black, conical, light) make for the Wisbech Bar buoy (red, conical, with globe topmark), and then proceed down the Wisbech Channel leaving to port the beacon on the NW end of Outer Westmark Knock shoal, this beacon being 21 feet high with triangular topmark. The channel here should not be entered before half flood, as it varies in depth and direction. Leave red conical buoys to starboard, red-and-white striped can buoys to port. A pilot can be obtained near the Wisbech Bar buoy. The straight Wisbech Cut begins six miles from the bar, passing between two tall towers. Having reached Sutton Bridge, bring up in the stream with one anchor from the bows, and another from the stern, at one side ; but from the other side have a good warp ashore from bow and stern. Spring tides run at 4 knots, and rise 20 feet. Neaps rise 15 feet. For time of high water subtract 4 hours 40 minutes from H.W.D.

King's Lynn, once famous for its Greenland whalers and collier brigs, is not particularly attractive for the modern yachtsman. As in the case of the other Wash ports, it is better to make any visit here at the period of Neaps when the strength and rise of tides are moderate. Having passed the Roaring Middle light-and-bell (black and white) buoy and the Bar Flat buoy, turn into the Lynn Channel, leaving all conical buoys to starboard and can buoys to port. The Channel turns to the SE and so into Lynn Cut. It is possible to lie at anchor off the dock entrance in about 1 fathom, but many yachtsmen will prefer to enter Alexandra Dock and lie afloat inside. The gates open at 1 hour before high water. A square blue flag means that you may enter : a square red flag that you may not enter, as a vessel is coming out. Great

caution should be taken in approaching King's Lynn as there are cross tides, and the shiftiness of the channel requires frequent alteration of buoys. A pilot can be obtained near Wisbech Bar buoy as previously mentioned. Otherwise the latest charts and consistent use of the lead are necessary. Springs rise 22 feet, Neaps 16 feet. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D.

Blakeney. This is the first harbour for a vessel bound North from Great Yarmouth, but it has the distinction of being one of the most difficult in the British Isles and of a lonely, desolate character when once it has been negotiated. Whilst it cannot be recommended, strangers should be warned that with even the most favourable conditions there is a distinct risk when making the entrance. Under no circumstances should it be attempted during a hard onshore blow. In fine weather and smooth sea, after having lost wind and tide on a summer's evening, Blakeney may be found convenient for a small yacht that has come up the coast from Great Yarmouth and is anxious to avoid a foggy night outside. The following notes should be used in conjunction with seamanlike care and systematic sounding of the lead.

At one time there existed a bar buoy off the entrance, but this cannot be looked for to-day. The first difficulty is to find any opening in the land, the coastline hereabouts having few contrasted features. Blakeney church tower and turret will, however, be observed conspicuous well inshore. With so much as a moderate northerly wind, Blakeney entrance seems to consist of nothing but lines of white breakers, yet as you reach them there suddenly is revealed a narrow opening of smooth water. Through this you pass quickly and, leaving astern the roar of waves against the sands, turn sharp to starboard into a calm inlet.

Crossing this bar is not infrequently nerve-trying. There

is always the danger of the ship broaching-to, hitting a shoal and being rolled over by the strong flood tide. A yacht using her engines will naturally enter at slow speed until the bend has been rounded. From time to time vessels get badly ashore at the entrance, receive injuries by bumping on the bar, or even become wrecks. No reliance can be placed on the exact position and depth at the mouth, as gales of wind cause modifications. But the channel, immediately after the bend to starboard, may be expected to run in a SW direction for the first mile, after which it turns to about ESE. Not more than a foot or two at L.W. Springs can be hoped for on the bar.

The best time to enter is 2 hours before high water, but allow for the very strong flood tide coming from the North and rushing across the mouth to the SE: otherwise a craft will be set ashore before she has begun the turn to starboard.

Whilst proceeding along the ESE course a lifeboat lying afloat will be observed. This is the anchorage known as the Pit. Bring up here with two anchors in a 6 foot pool. Quite secure but exposed to a 5-knot tide at Springs. At low water investigate the channel in the dinghy. Beacons must not be trusted too much. On the last of the flood go up to Blakeney village for simple stores. With a light WSW wind at high water there is but little swell on the bar.

For time of high water at Blakeney Bar subtract 4 hours 45 minutes from H.W.D. Spring tides rise 15 feet, Neaps 10 feet.

Great Yarmouth Harbour should not be entered when a southerly gale is blowing against the ebb, as the seas at the mouth will be very dangerous for a yacht. In autumn the harbour is somewhat congested by the herring fleet which lie at the quays. In entering between the two piers carry plenty of way, give the North Pier a good berth, beware of the strong tide setting across the mouth, and be alert for

other vessels. There should be over 2 fathoms here, though easterly winds tend to shoal the entrance. The tidal stream flows into Great Yarmouth until H.W.D. and ebbs till L.W.D., up to a rate of 4 knots and over. In fine weather a 7-knot power yacht can always bore against the strongest Spring ebb, but care should be exercised in turning at the elbow just inside. A red flag by day, or a red light by night, on the South Pier means that the tide is running in : green pennants by day, or a green light by night, that it is running out. Go right up this long, narrow harbour and secure to one of the quays, the best time to enter being just as the young flood makes. A NW wind tends to hasten the flood : a SE wind to delay it.

Access to the Broads is possible after passing Southtown Bridge, which should be undertaken just before the flood begins running up. Masts will have to be lowered before going up the River Bure. Yachts with upperworks and all obstructions not exceeding a height of 7 feet from their waterline, and a draught not over 4 feet can navigate under all the fixed bridges in the northern area of the Broads. Yachts with fixed masts can go inland both to Beccles and Oulton (and so by the back way into Lowestoft) as well as up the Norwich River, because of the swing bridges. The tide runs out from the Yacht Station on the Bure at Yarmouth for another $1\frac{1}{2}$ hours after low water : it is therefore during a short period flooding and ebbing simultaneously—a condition that is convenient for shifting berth.

Yachtsmen are not recommended to anchor outside the harbour in Yarmouth Roads. Whilst this is used by coasters, and the holding ground is good, the area is too exposed and the riding uncomfortable for small craft except in very settled weather. All requirements as to stores of every kind ; repairs to hull or engine ; are obtainable. If bound South during uncertain weather, Lowestoft will be a convenient shelter. If bound North, it would be foolish for a

small yacht (especially without a good motor) to start out until the weather is set fair. It is a long drag for a slow craft up to the Humber, an ugly short sea soon gets up, and the shore with its miles of lonely sand dunes and green tufts of grass provides no consolation. To find time of high water at Great Yarmouth entrance, subtract 1 hour 50 minutes from H.W.D. The fall of tide is very slight, Springs rising only 6 feet, and Neaps $4\frac{1}{2}$ feet. It is the immense volume of water pouring out through one narrow neck from all the Norfolk Broads and rivers which creates such a heavy ebb during a wet season.

CHAPTER II

FROM LOWESTOFT TO RAMSGATE

Lowestoft. In approaching from the South, there is no difficulty in recognizing a large, prominent red-brick building (formerly an hotel but now a hospital), the Claremont Pier, and the distant pavilion of the harbour. The yacht club, yacht masts, and the two circular pier heads, as shown in the accompanying sketch, will easily be identified. By the time Claremont Pier is abreast, mooring ropes for bow and stern should be got ready, as the entrance is narrow; there is a strong tide across the mouth, and the Yacht Basin (which is usually crowded during the yachting season) allows but little room for manœuvring. A yacht under sail will need plenty of canvas till well inside the *Outer Harbour*, yet must not have too much way on by the time she passes into the Yacht Basin. All halyards will therefore have been prepared for letting go smartly.

The tidal stream runs North from the time it is H.W.D., and turns South at 6 hours after H.W.D. If you have arrived from the South with a fair tide, it is necessary to hug the southern pier of the Outer Harbour quite close in order to avoid being set to the northward. Similarly, when entering from the North with a south-going tide, plenty of way must be maintained and the starboard pier kept aboard. But in both cases a sharp lookout must be observed for traffic putting to sea, which frequently congests the narrow bottleneck. Especially is this the case when the smacks are sailing forth, and they are several abreast. If two green flags are hoisted at the South pierhead, you will know that one of H.M. Ships

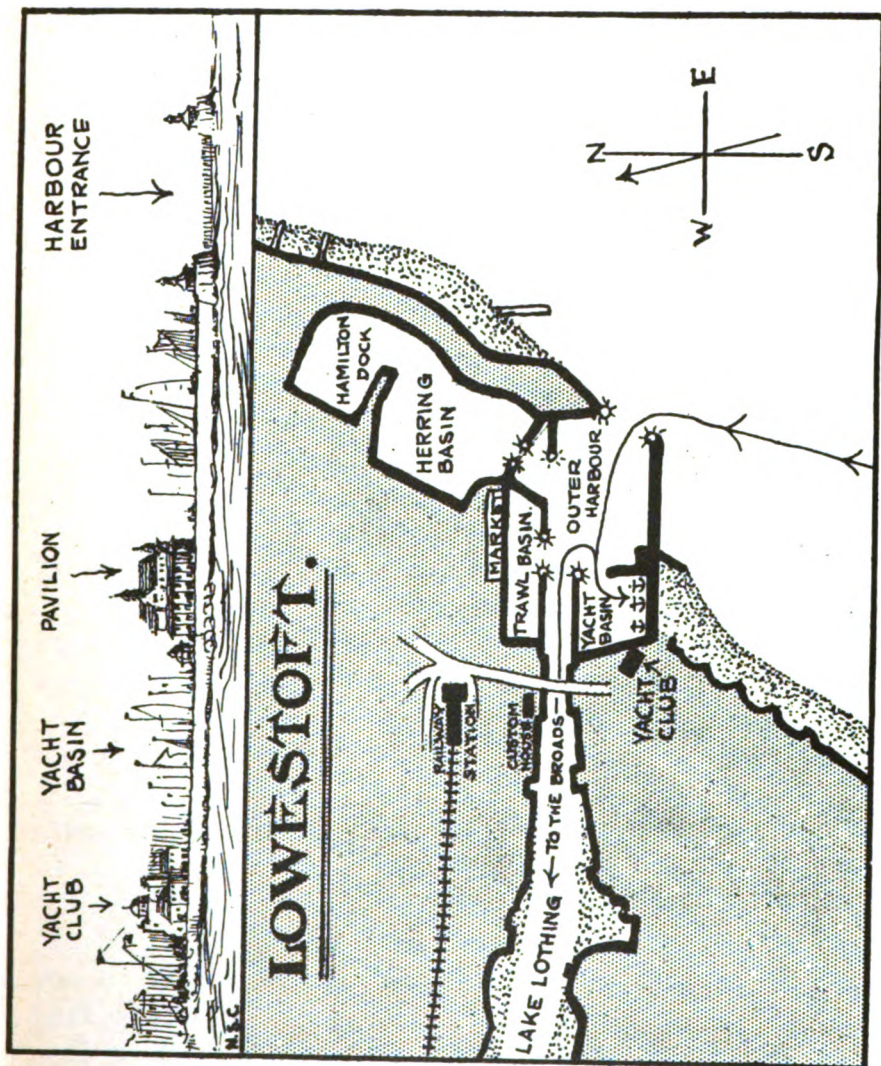
(usually a fishery-protection cruiser) is about to enter : if there is one green flag, it means that she is coming out. And in either case no other vessel is allowed to move through the Outer Harbour.

For a power yacht Lowestoft entrance requires only normal prudence, but she may find other power craft, such as tugs, partially hidden from view. As soon as the motor or steam vessel reaches the Outer Harbour, well inside the piers beyond the tidal stream, speed has to be eased to 4 knots always. After easterly gales, which drive in the sand, there is a tendency for the mouth to shoal, though a dredger immediately gets to work and usually a depth of 10 feet is to be found. A yacht under sail will do well to give the dredger the widest possible berth.

The Yacht Basin, which will be seen straight ahead to the westward, with the premises of the Royal Norfolk and Suffolk Yacht Club at its extremity, is easy of access, but with southerly winds a sailing yacht will find herself suddenly becalmed when under the lee of the pavilion. Generally a local man in his dinghy will be waiting in the Yacht Basin to run off ropes and assist you to warp into a clear berth, but it is well to note that yachts moor in two tiers with their bows to the North and stern to the South. Small craft occupy the inner tier where shown in the Plan by anchors. The custom is either to make fast the bow warps to a dolphin, or ride to one's anchor : but the stern lines will be made fast to pier or a thick wire cable running parallel with the same.

In easterly winds this basin is subject to a continuous roll, and under those conditions a better berth can be found at the extreme eastern end of the adjacent Trawl Basin, though the northern side thereof must be left clear for the smacks.

This is a dirty bit of coast off which to be caught in bad weather, and the shallow channels of approach soon kick up a short wet sea. Especially is this the case during easterly



APPROACH TO LOWESTOFT FROM THE SOUTH

Owing to changes in the sands off Lowestoft, the approach to this harbour is less simple than formerly. Fishing smacks, and other vessels of at least their draught, now go 10 miles round via the chequered bell-and-gas buoy; but the Covehithe Channel and Pakefield Gat are still available for small yachts, although this route be officially closed and the inside buoys removed.

and north-easterly winds. In thick weather the fog signal from the South pierhead will be a guide, but avoid getting too far West until you can satisfy yourself of its position. The tide is weakest across the entrance at $1\frac{1}{2}$ hours before local high water.

Whilst the Yacht Basin is quite safe in all weathers, and very convenient for landing at the steps of the pier, or the Yacht Club, or the quay, there are so many warps to be cleared and slacked off that there is little inclination to go out for a day's sail.

Some yachtsmen, having reached Lowestoft, may feel tempted to prolong their cruise to inland waters. If desirous of visiting the Broads, you must pass through the first bridge into Lake Lothing. A red flag by day, or a red light by night, indicates that the bridge cannot be opened. A green light shows that it is closed, but can be opened on request. A white light shows that it is now open. The best plan is to interview the bridgekeeper and arrange for a suitable time, for there is considerable road traffic, and this cannot be held up just before trains are due to leave the railway station which is hard by. Lake Lothing is a navigable waterway, with all kinds of shipping lining the quays and had better be inspected at low tide, for there are plenty of spots at its western end where a stranger may get ashore, in spite of the booms. Another railway bridge (which will be opened in response to your fog horn) brings you to Mutford Lock, through which entry is gained into Oulton Broad.

Here the tide takes its time from Yarmouth and not Lowestoft, and is therefore later. The holding ground is not good, so it is better to hire a mooring if stopping the night. Yachts of 6 feet draught and with fixed masts can navigate right up to Norwich, Yarmouth, and Beccles. At Lowestoft there are sailmakers, shipyards, motor mechanics, sailmakers. The hospitality of the Royal Norfolk

and Suffolk Yacht Club is unrivalled anywhere along our coast, and drinking water from a tap near the steps can readily be obtained.

Spring tides rise $6\frac{1}{2}$ feet. Neaps rise $5\frac{1}{2}$ feet. For time of high water subtract 1 hour 20 minutes from H.W.D.

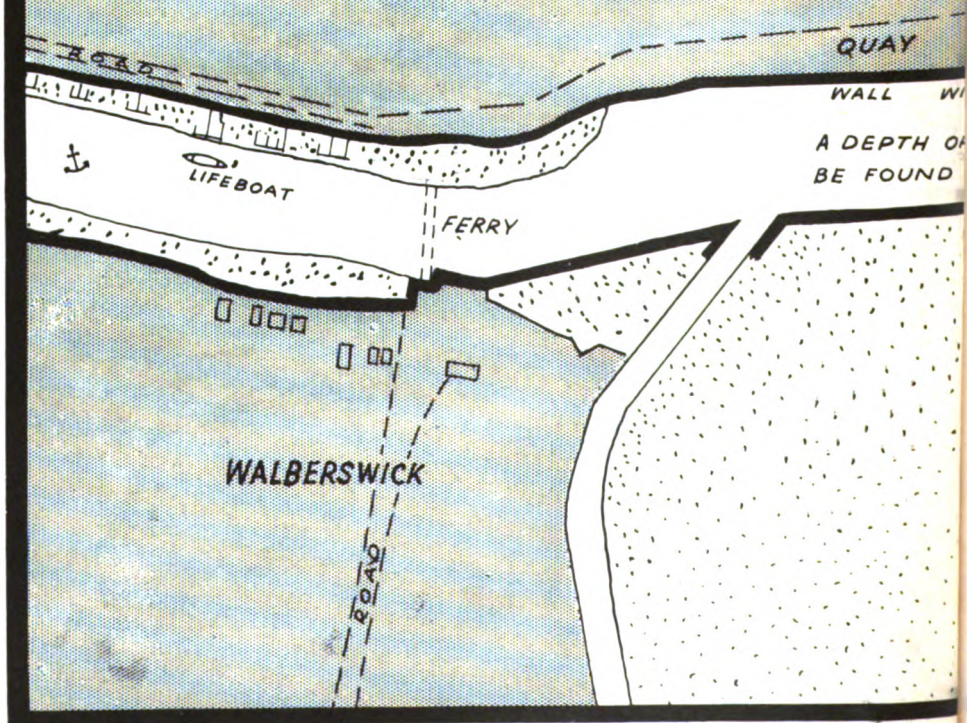
Southwold. Southwold Harbour may be found very convenient for a small craft that is bound South from Lowestoft but has encountered too heavy seas off Orfordness. Sailing craft on their way North to Lowestoft may be glad to spend a quiet night in Southwold Harbour after being becalmed and having lost their tide.

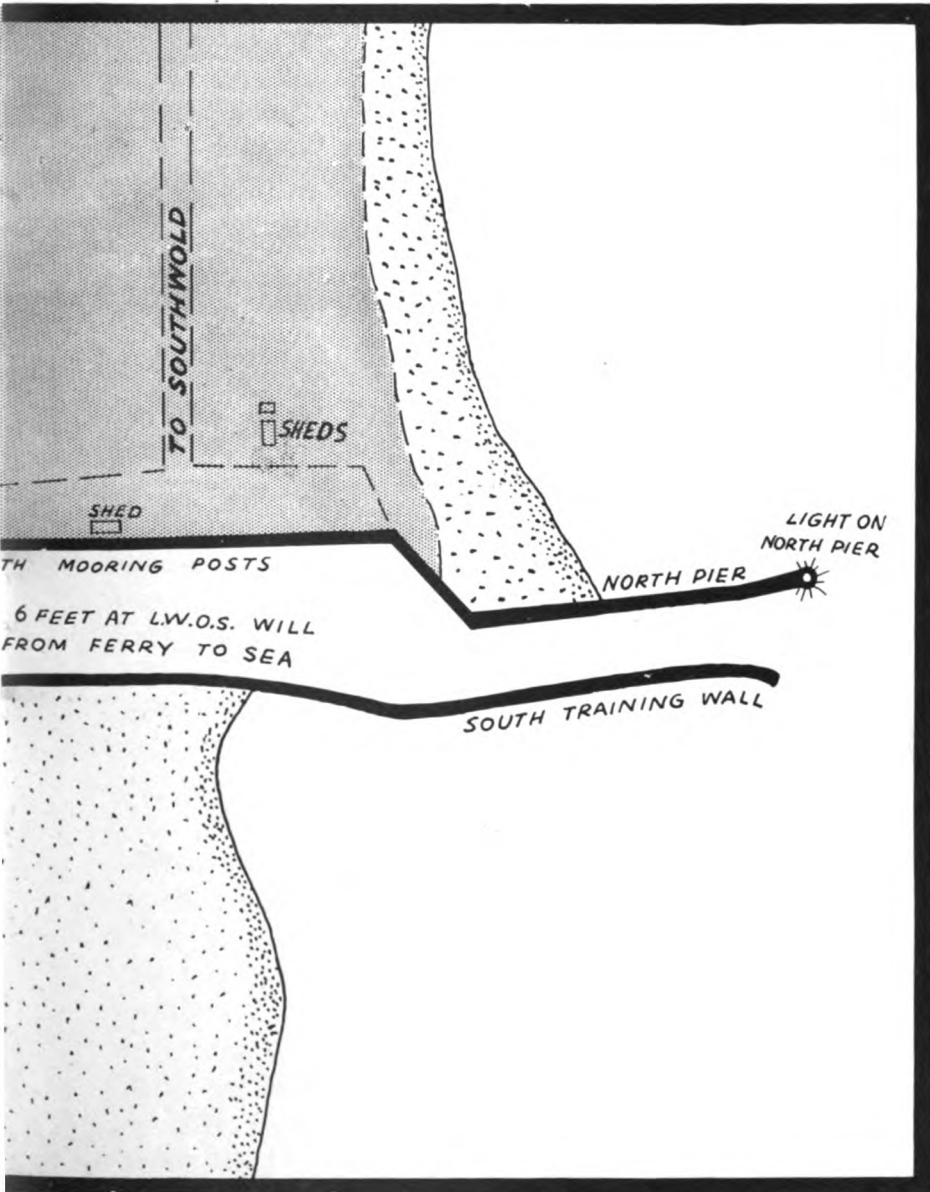
The entrance is not easy to discern from the offing, but the conspicuous Southwold Lighthouse (120 feet high) will be of some help. This light-tower is white and circular, being situated in the centre of Southwold town, about two miles to the North of Southwold Harbour, and quite distinct. The tower of Walberswick Church is on the South side. Thus you may know that the harbour lies between these two visible marks. Formed by the River Blyth, this haven is sometimes called Walberswick, after the village, which has a road running down to the southern terminus of the steam ferry.

A stranger should stand in towards the coast with caution when about a mile South of Southwold Lighthouse and keep a smart look-out for the narrow entrance. The mast of a motor barge, within, may be of further aid to identification, and small motor fishing craft may be seen entering on the flood. Several of these are frequently found at work in the bay, and for three or four shillings any of the skippers would be willing to give the latest information as to the harbour's condition. These fishermen belong to the best type, which helps, and does not fleece, yachtsmen. There is also a local Trinity Pilot available.

SOUTHWOLD HARBOUR

AS RECONSTRUCTED 1937





With a heavy onshore wind, especially if a Spring ebb be pouring out, the risk of disaster would be very considerable. Even during Neaps a vessel drawing $4\frac{1}{2}$ feet should, if possible, avoid coming in or out near time of Low Water. There is a light at end of North Pier, but not on South training wall.

Keep in mid-channel between the North Pier and South training wall. Having passed through this narrow space, the width increases, and the northern side now consists of a wall with mooring posts, quay, and one or two sheds. Steer in a westerly direction until abreast of Dunwich Creek, which is on the South side, when alter course to the SW, avoiding the shoal water which exists on the North shore West of the quay. When almost abreast of the ferry keep in mid-stream again lest you get picked up by the mud on either side. The anchors shown on the accompanying plan indicate the most suitable place where to bring up. The shelter here will be found excellent, and there is a ladder for landing on the South shore opposite this anchorage.

Those yachtsmen who until a few years ago used to visit Southwold Harbour will notice important alterations. After having been much neglected, this port in 1933 was taken over by Southwold town, and about £30,000 has recently been spent on reconstruction. In the early part of 1937 both the North and South Piers were considerably damaged by the seas, rendering the harbour impracticable. Then, with better weather, sufficient clearance was made so that the local longshore fishing boats could get in and out, but only during very fine weather. With the completion of alterations by the end of 1937 the following changes should be emphasised: the former South Pier replaced by the South training wall (already mentioned); the North Pier repaired; the jetty (which used to exist East of the ferry and projecting at right angles to the North quay) done away; but the depth of water between walls and piers permanently maintained at 6 feet L.W. ordinary Spring Tides. Before you have altered

course to the SW, you will now have observed the steam ferry for several minutes. Give him warning of your approach, as the river is narrow, and you don't want to foul his chains. If you blow your foghorn and wave your cap, he will wait and give you a clear passage.

The wooden stages on the North side, when past the ferry, are congested with mud except towards high tide, so keep away. If the lifeboat is in the harbour, carry on till a sufficient distance westward and let go anchor on the southern side. A little further up there are sometimes spare moorings, which can be hired from the local boatbuilder whose shed is on the North side just opposite. If the lifeboat has gone away, her berth is the best in the harbour and should be occupied. But almost anywhere West of the ferry and not too near either bank will be found a suitable anchorage. Lay out a kedge. However hard the winds blow from any direction, you are now quite safe. Tide in the offing flows South at $5\frac{1}{2}$ hours before H.W.D., and flows North at $\frac{1}{2}$ hour after H.W.D.

This is a primitive, picturesque region, but full of attraction to those who enjoy peaceful beauty. There are some delightful walks and interesting old churches, and the town of Southwold can be reached either via the wide expanse of common (after landing abreast of the yacht) or by the road which runs parallel to the North Sea. It will be necessary to obtain most of your supplies from the town, except water from the boatbuilder and a few simple articles from Walberswick, where are two good Inns. There is an excellent bathing beach by the sea on that side. The dinghy can be safely left by the quay, or by the bank on either side, but allow for the tide.

Southwold Harbour has its pathetic character. Before the war many thousands of pounds were expended to make it a miniature Lowestoft and attract the Scottish fishing fleet when it came South for the herring season. A light railway

was laid along the North shore, where a fishmarket also existed, and for a time the place took on a busy aspect. But the railway has long since become derelict and the round fishmarket gone. Water is now laid on to the quay, a regular bus service runs from the North Quay to Halesworth (L.N.E.R.). The railway bridge some distance above the ferry still exists, but no longer swings. By removing the sand and shingle from the harbour and keeping it dredged to a depth of at least 6 feet (L.W.O.S.) small craft are sure of finding $10\frac{1}{2}$ feet at top of High Water Neaps and $12\frac{1}{2}$ feet at top of High Water Springs. Vessels drawing 6 feet should not moor below the ferry, but anchor as mentioned above the lifeboat.

Spring tides rise $6\frac{1}{2}$ feet. Neaps rise $4\frac{1}{2}$ feet. For time of high water subtract 1 hour from H.W.D.

Orford Haven should never be attempted except with the assistance of a local pilot, as the bar frequently shifts, and the tide is strong. Arrive off entrance and signal for pilot who will come off in small lugsail rowing boat. Fee 7s. 6d. entering, and the same amount when leaving. Spring tides rise $7\frac{1}{2}$ feet. Neaps rise $6\frac{1}{2}$ feet. For time of high water add 15 minutes to H.W.D. Metes or leading-marks are maintained by the pilots.

Deben River. The Deben River, otherwise known as Woodbridge Haven or Bawdsey Haven, is a convenient harbour situated between Harwich and Orfordness, providing safe anchorage for small craft in all weathers, but the entrance requires caution.

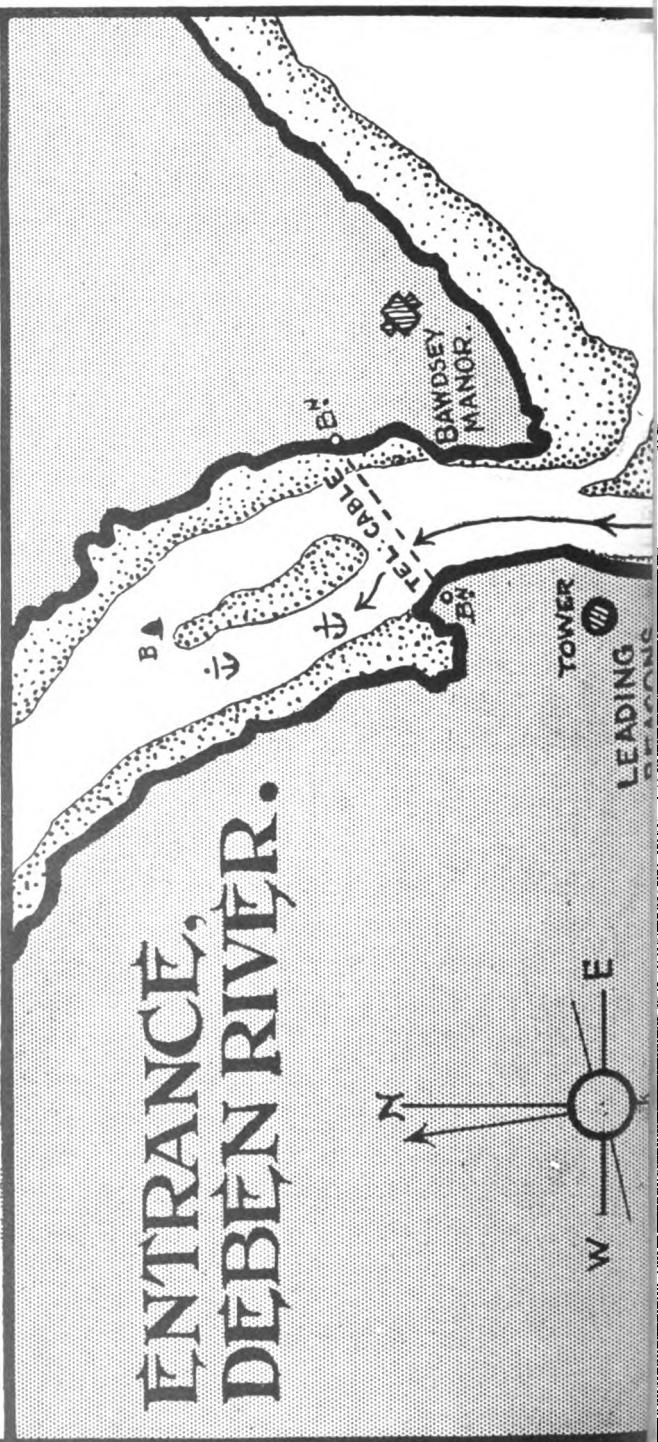
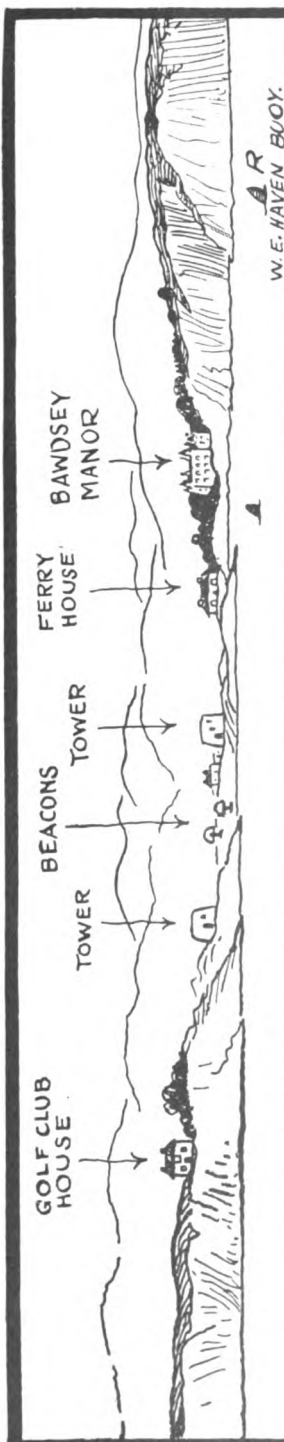
Like other harbours along this coast, the entrance is apt to be changed from time to time owing to the effect of gales on the sand banks. The first warning to be noted is that of keeping well away from the shore until a red conical buoy marked "W.E. Haven" is sighted seawards and to the East of the entrance. Before this buoy has been picked up you

will have noticed (reading from SW to NE) the white Golf Clubhouse, a martello tower, then another martello tower, the ferryhouse and—more prominent still—Bawdsey Manor, as shown on the accompanying Plan.

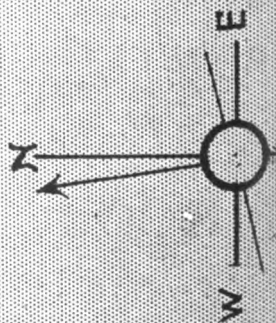
Having given the shore a wide berth, and sighted the "W.E. Haven" buoy, make for the latter, thence steer on a westerly course with that red buoy, a small black conical buoy, and the first-mentioned martello tower all in line, until you now see two leading beacons (locally called "metes") come into line. Alter course towards them and keep them in line until within fifty yards of the beach, when course must be again altered to steer in a northerly direction up the river, keeping slightly to the West of mid-channel. These two "metes" are not easy of identification at the first occasion. They are shifted from time to time as the channel alters, and they mark the best water.

Continuing up the entrance between the shoal to starboard and the shore to port, a second martello tower is passed. Bawdsey Manor is on the eastern shore, and at the narrowest part of the river one should bear in mind the telegraph cable. Be careful not to anchor here. The shore telegraph beacons will be adequate warning on either side. Anchor 100 yards to the North of the latter and on the West side of a shoal (see Plan) which occupies the centre of the already widened river. Another anchorage will be found a little higher, and to the SW of a black conical buoy which marks the up-river end of the shoal.

The "metes" just mentioned consist of white board top-marks on red posts, and occasionally at night, for the convenience of pilots, a fixed light is placed on each post at tide time to form leading lights. The "W.E. Haven" buoy is liable to be moved as requisite after the sands have been shifted. Some yachtsmen, visiting this haven for the first time, may prefer to take a pilot. Indeed, unless it is fine settled weather, and there is neither much wind nor sea



ENTRANCE, DEBÈN RIVER.



it is prudent to accept local guidance. The best time to enter is just before half-flood, when there will be about 3 feet least water over the bar. Trinity House pilots will come off, when there is enough water, provided the yacht makes a suitable signal, such as any of the following: pilot flag hoisted at the peak, the burgee partly lowered, or a flag displayed in the rigging. These pilots come off in their own boat, and the charge for being guided just inside is 1s. 3d. per foot draught for vessels under 10 feet. It is, therefore, well worth 5s. for a small craft thus to learn the way and the local marks. At night the signals for a pilot consist of either burning a flare or flashing a light rapidly.

If you should reach the "W.E. Haven" buoy when the tide is ebbing, or it is only just low water, heave-to off this red buoy until the tide has made sufficiently; but in no case should the entrance be attempted before the second hour of the flood.

By careful regard to the above directions in conjunction with the plan, as well as the sketch showing the estuary's appearance from outside, a stranger can proceed with confidence. But it should be noted that the ebb sets out with such force that no sailing yacht could stem the tide except with a strong fair wind; a fresh southerly wind against the tide means such a nasty sea that there would be an unpleasant experience, with a risk of disaster if keel touched the sand. Even a craft under power is much better advised to wait till the flood has been running some time. Only under such conditions as a quiet summer's day, with a light southerly wind and the tides at Neaps, should the stranger in a small sailing craft first tackle this harbour.

The flood sets quite regularly between the banks until sufficient water has covered them, after which it flows all over the shoals. The ebb sometimes attains a speed of 6 knots, though the flood is not excessive. Easterly gales raise the height of tide and prolong the period of high water.

After passing the more northerly of the two martello towers, a course can be kept in mid-stream, but a lookout will be maintained for the ferry. The horse shoal in the next reach dries $4\frac{1}{2}$ feet at L.W., but the rippling discoloured water will keep you from getting on to this obstruction. The holding ground and ebb tide combine to demand plenty of cable and good gear. Beware of the moorings at the suggested anchorage, which are laid not up and down but athwart the stream.

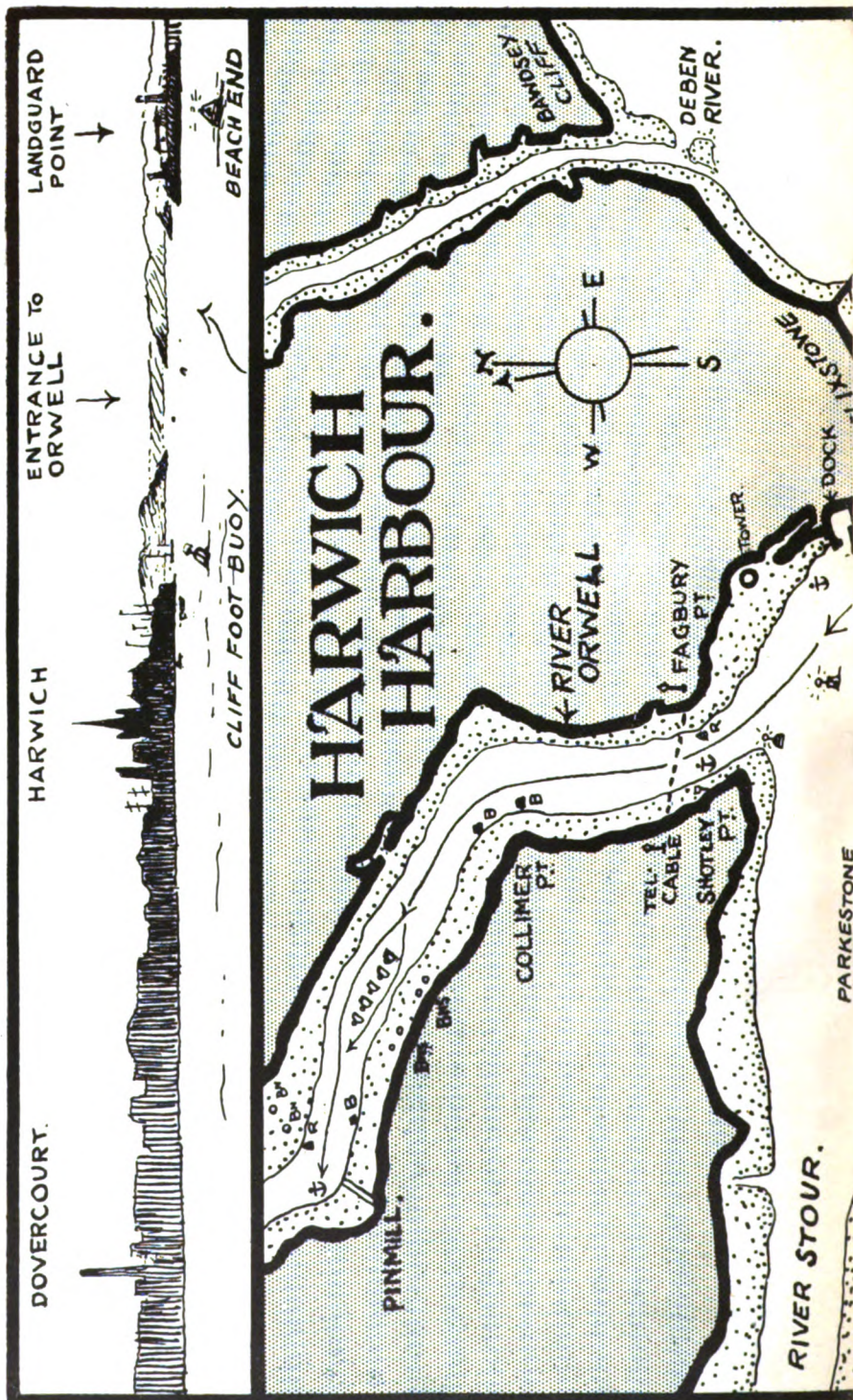
The dinghy could be left near the ferry landing, and water obtained from the Inn at the Felixstowe Ferry (or western) side, Bawdsey itself being on the eastern side. If stores are required, there is a motor-bus which runs into Felixstowe town a distance of less than 4 miles. Letters can be posted at Felixstowe Ferry.

The upper reaches of Deben River are very beautiful and restful. There are boatbuilders at Woodbridge, with the railway station quite close to the water. The latter may be found convenient if a dinghy has to be sent by train.

Spring tides rise 11 feet. Neaps rise 8 feet. For time of high water add 26 minutes to H.W.D.

Harwich. Harwich Harbour comprises the two rivers Orwell and Stour, which meet at right angles off Shotley Point. During the War Harwich was a busy Naval base for light cruisers, destroyers, submarines, minesweepers and other craft; and it was into the Stour that the surrendered German submarines were brought after Armistice. To-day, however, apart from the Parkeston-Hook of Holland steamers, together with some coastal trade carried on especially by sailing barges, the yachtsman will encounter very little traffic up the Stour.

The Orwell is visited by a number of ocean cargo steamers which reach Buttermen's Bay, where they secure to buoys (indicated in Plan) and discharge their freight into barges



for Ipswich. It is the Orwell which has the principal attraction for yachtsmen, affording the better anchorages amid delightful scenery.

The lower portion of Harwich Harbour is somewhat exposed to southerly winds and the tide is fairly strong, but the channel is wide and easy of access, being excellently buoyed. In entering, keep over to the East side within the buoys and follow the line shown in the Plan. Formerly, Felixstowe Dock on the starboard hand was a convenient anchorage if staying only a night, but those days have passed.

If the yachtsman has come into the harbour with the sole reason to remain for the night and get away next morning, he can anchor : (1) Beyond Felixstowe Dock to the NW and as far inshore of the tide as the soundings will permit. But with a fresh southerly wind against the ebb this is not too comfortable a berth for small craft. There will be less traffic, less tide, and more shelter if he brings up (2) to the East of Shotley Point, a little North of the Orwell's confluence with the Stour, as marked by an anchor in the Plan, but well to the southward of the telegraph cable. This anchorage has many advantages for those who merely desire a quiet berth with plenty of room in riding to a single anchor, and is well placed for clearing out to catch a tide along the coast, yet so situated that if it comes on to blow hard it is quite easy to run up-river.

One of the snuggest and most sylvan anchorages on the coast between the Isle of Wight and the Deben River, however, is further up the Orwell at Pin Mill. The only disadvantages are that it is a long way from the sea, and that the hard at low water is somewhat muddy for landing. There is an Inn at the beach, with a sailmaker's at the back thereof, and a boatbuilder's a few yards away. A small village store is also at hand. But for such supplies as meat, it is necessary to walk up the hill to Chelmondiston where a Post and Telegraph Office is found besides a few small

shops. Through Chelmondiston pass the motor 'buses which run at frequent intervals to Ipswich railway station.

Pin Mill is a suitable spot if desirous of leaving a yacht until the next week-end, and Ipswich has one of the best railway services to London. Usually there is no difficulty in hiring a mooring at a reasonable fee, and a motor mechanic from Ipswich will come out to do any repairs. Pin Mill is also suitable for putting a vessel ashore for a scrub. The surrounding scenery is particularly restful, and this is one of the choicest places in England for hearing the nightingale.

Get as far into Pin Mill bay as the mud permits, so as to be clear of sailing barges which, when turning to windward, have been known occasionally to foul yachts. Pass close to the cargo steamers at the Buttermen's Bay buoys on whichever side is convenient. If not desirous of proceeding so far up as Pin Mill, there is an excellent anchorage just below Buttermen's Bay and above Collimer Point. Beware of passing too close to the latter, as the mud projects further than would be expected and strangers (especially when turning to windward) are apt here to get ashore. But by steering well in mid-channel this is the only trap between Shotley and Pin Mill. For a conical buoy abreast of the Shotley anchorage will keep you off the eastern shallows.

Fresh water can be obtained at Pin Mill, and one of the most delightful rambles in the cool of a summer's evening is through Woolverston Park. Pin Mill, so far unspoilt by the excess of civilization, is a convenient place for laying a yacht up during the winter, and the prices are reasonable. The Butt and Oyster Inn, with its skippers from the barges, is like a living page out of W. W. Jacobs' stories. There is a general atmosphere of simple kindness and seamanlike sympathy, which is in violent contrast with the conditions at certain other ports. If compelled to remain at Pin Mill

weather-bound, you might be in a much worse locality, and there is ample opportunity for dinghy sailing, but beware of standing too close in by the mud on a falling tide.

Yachtsmen making passages between Lowestoft and the English Channel find Harwich's anchorages convenient for stopping a tide. If entering the harbour from the eastward by night, there is a splendid system of lights. Having passed the Cork lightvessel, steer to leave the Platters red conical (light) buoy to starboard and make for the Beach End bell (light) buoy. After leaving this buoy to starboard and altering course to the northward, keeping over on the eastern side, there will be no difficulty in regard to the other light buoys up the harbour. If coming in from the South through the Medusa Channel, it will be noticed that the Stone Banks buoy (staff and cage topmark) is unlit, but a bearing can be taken of the Beach End buoy with its double flash every 10 seconds. By day or night when using the Medusa Channel, keep well away from the Naze shore abreast of the castellated tower, which rises conspicuously on the headland, and pass the Stone Banks buoy fairly close on its western side.

Spring tides rise $12\frac{1}{2}$ feet. Neaps rise $10\frac{1}{2}$ feet. For time of high water add 41 minutes to H.W.D.

Walton Backwaters. To enter, keep the Cliff Foot buoy in line with Landguard Fort astern. You will thus pick up the Pye End buoy. Having arrived abreast of the latter, you will see the small buoys marking the channel. Carry on in a SW by W direction, leaving the black buoys to port and the red ones to starboard, but be careful not to borrow on either side. Stone Point was somewhat of a trap in days gone by, but now it is beautifully marked by port hand buoys. If bound up the Walton Channel, leave to starboard the cask buoy which has a staff and cross topmark, and is moored off Island Point. There is little difficulty in going up Walton

Channel, provided you keep well away from each side. Anchor either at the southern end of this channel, or else in the Twizzle, which is the creek that runs out of it to the West. The holding ground in the Twizzle is not perfect. Lie afloat here at all times. Row up in the dinghy to Walton any time between 2 hours flood and 4 hours ebb. Fresh water obtainable from the hard by courtesy of the Walton and Frinton Yacht Club. Stores from Walton-on-Naze.

Great caution should be exercised by a stranger at his first visit to this harbour. In particular do not get ashore on Pye Sands, which are hard and steep-to. It is better to await 2 hours' flood. Do not come in during a hard easterly blow.

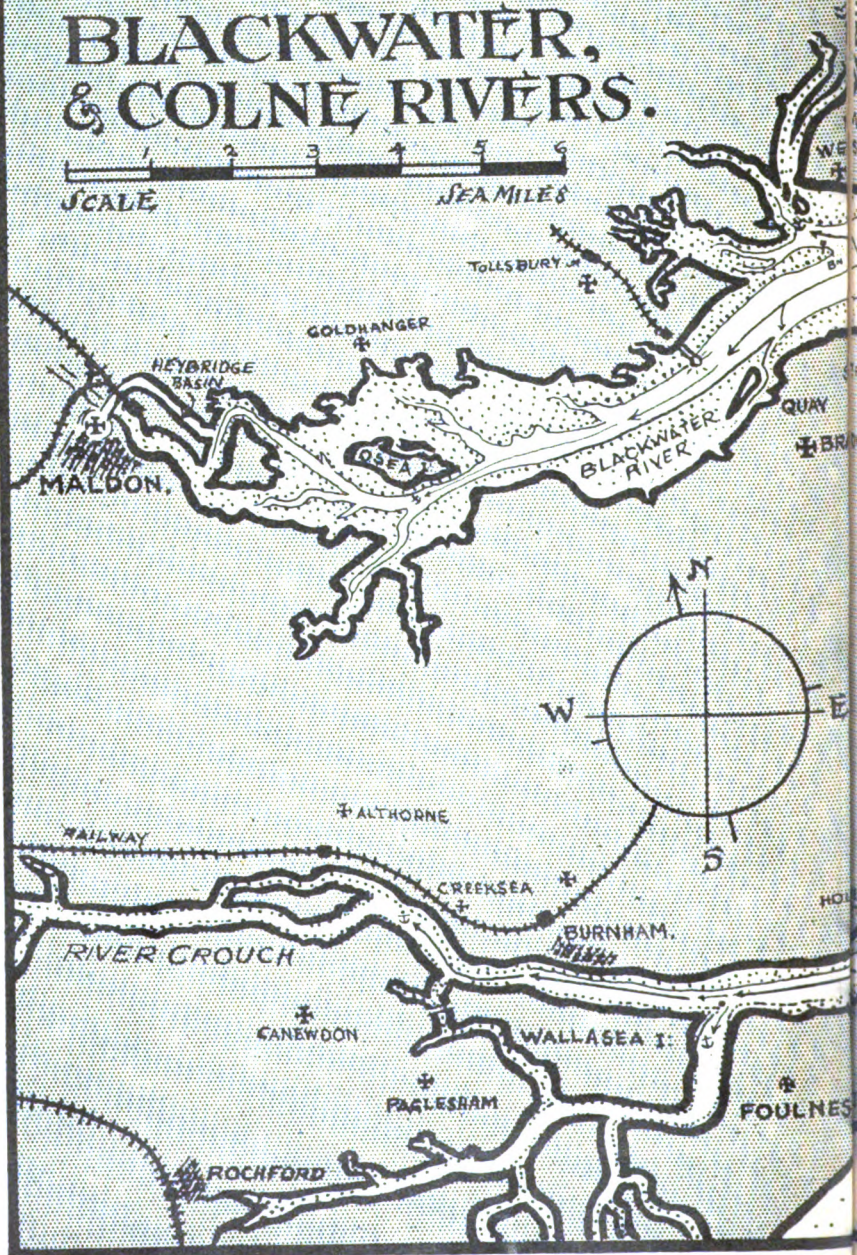
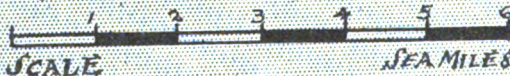
Spring tides rise $12\frac{1}{2}$ feet. Neaps rise 10 feet. For time of high water add 40 minutes to H.W.D.

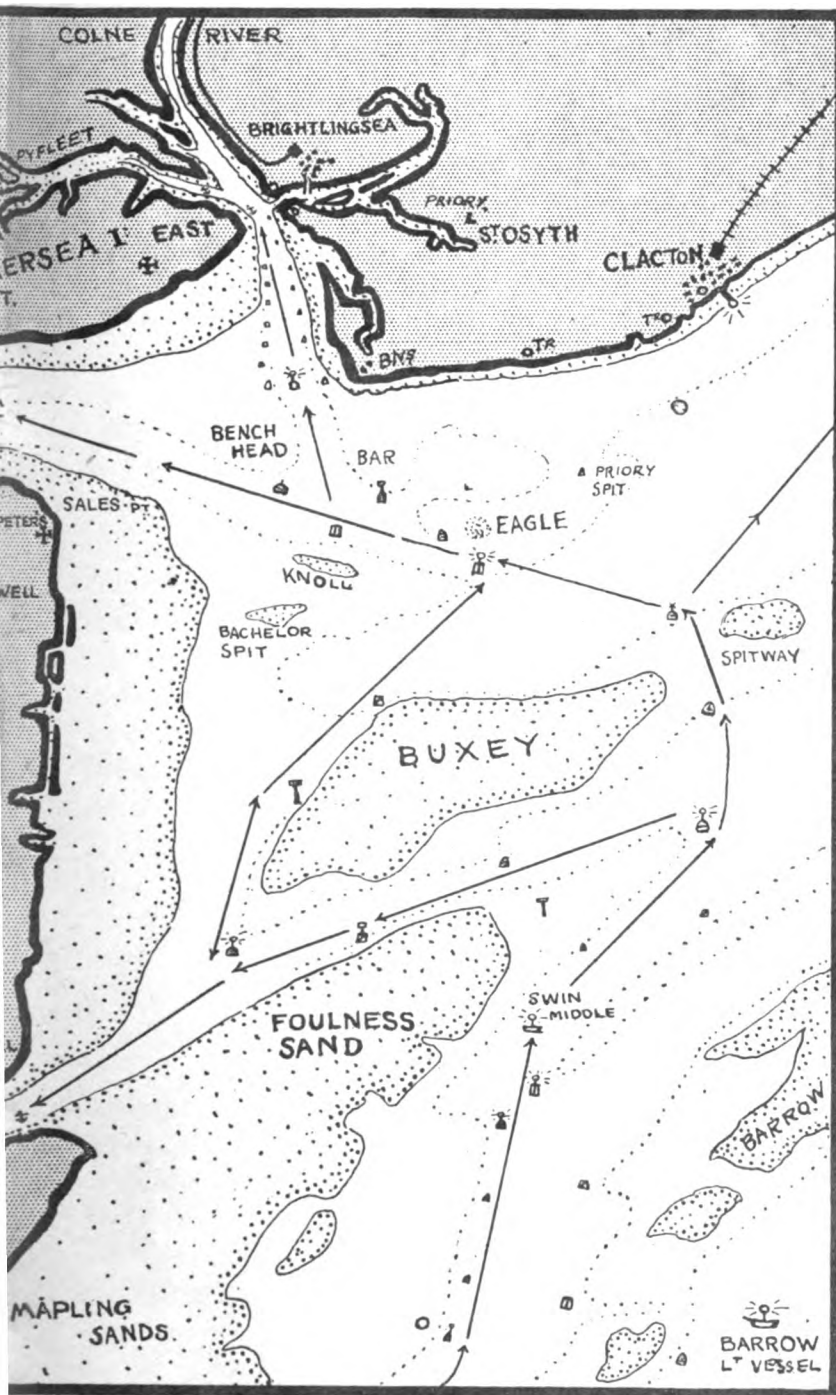
Colne, Blackwater, and Crouch Rivers. If a stranger, accustomed only to deep water sailing and a rocky coast, approaches these three rivers for the first time, he must needs proceed with caution between the numerous shoals which lie some distance from the low-lying shore. Landmarks are few, visibility frequently is poor, but there is an adequate system of buoys and beacons which must not be encroached upon.

Having arrived from Harwich and passed Clacton, the outer approaches to the Colne and Blackwater will be found marked by the red conical Priory Spit buoy and the red conical Eagle buoy, while to the southward will be seen the red and white, vertical striped Knoll can buoy, which has a light. To the NW will next be identified the NW Knoll can buoy, which is red and white chequered.

If proceeding into the Colne, the channel will reveal itself immediately to the North of the NW Knoll. On the star-board hand leave a red conical buoy having a staff and globe topmark. This is the Colne Bar. On the port hand leave

THE CROUCH, BLACKWATER, & COLNE RIVERS.





the buoyage in the above area is subject to periodical modification, this plan could be regarded only as a general guide, and the latest Admiralty chart consulted.

a spherical buoy having red and white horizontal stripes. This is the Bench Head. Give each of these two last mentioned a wide berth and carry on northward till you come to a black can light buoy, which flashes every 5 seconds and marks the western side of the Colne. This is the Inner Bench Head and is left to port.

The entrance is now easy, the eastern side of the fairway being marked by red conical buoys and the western by black can buoys. The stranger must not be confused by an additional line of buoys to the West of the latter, the black and white being only fishery buoys.

Brightlingsea creek will next open up on the starboard hand, but this harbour is generally pretty full, though a good anchorage can usually be found for small craft inside, near the SW end of the island which separates the creek in two. Most yachtsmen, however, will prefer to bring up where indicated by the Plan ; that is to say, either off the hard at East Mersea, just opposite Brightlingsea creek, or a little further to the NW in Pyefleet creek, which is quite a snug berth. Unless there is some special reason, Brightlingsea is better avoided owing to its congestion and sundry petty annoyances ; but there are shops, yachtbuilders, sailmakers, and other facilities. In entering Pyefleet leave the black buoy well to starboard and anchor just inside the creek. The fishery police boat will be observed within, her duty being to protect the oyster beds.

The entrance to the Blackwater from the NW Knoll buoy, as indicated by the Plan, is much simpler than the Colne, whilst the scenery is more pleasing and varied, with deeper water. On the North side West Mersea, on the South Bradwell creek, and at the south-western end the anchorage off Osea Island all afford good berths ; whilst still further up the river is Heybridge Basin with its lock gates and perfect security. There is plenty of depth in the Blackwater channel so far as Osea Island, but an easterly wind is apt to make the

river uncomfortable for small vessels if anchored anywhere East of that island. A red fixed light is shown from Osea pier head, and two red fixed vertical lights on Tollesbury pier.

Beware of standing in too close on the northern side, where the Goldhanger flats run out to restrict the channel after Tollesbury pier has been left to the eastward. Above Osea Island the channel is marked on the North side by red barrel buoys and on the South by black barrel buoys. If intending to reach Heybridge, and you have come up the Blackwater with only the young flood, it will be necessary to anchor off Osea pier until sufficient water has risen for navigating the upper reaches. At Neaps there is not less than 4 feet from here to Heybridge Basin when the tide is half-flood, but the lock gates are not opened for longer than an hour before and after high water. Perfect security, peace, and picturesque surroundings will be found in the Basin, where the environment is strangely reminiscent of Holland. After passing through the lock, make fast to the bank on the port hand at a convenient distance up this quiet canal.

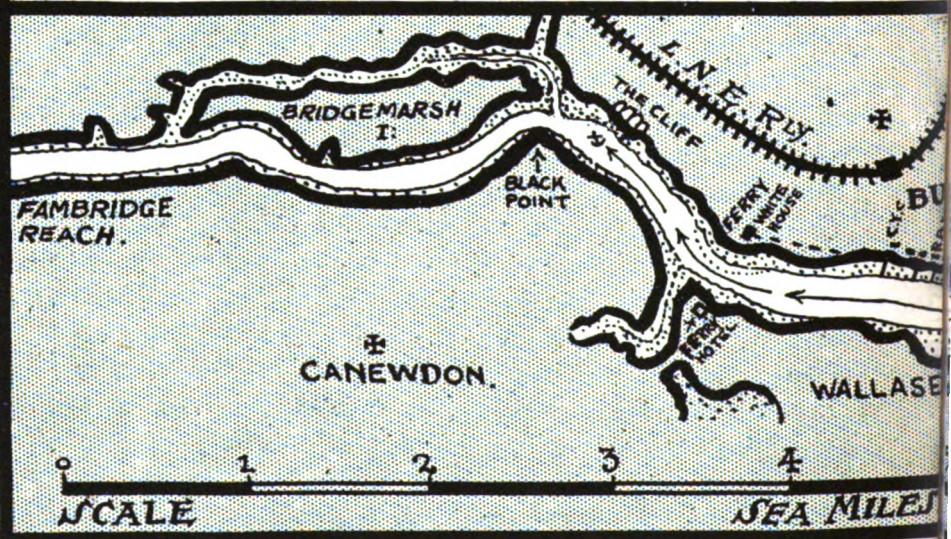
Bradwell creek, whilst affording good anchorage in normal weather for light draught vessels, is so narrow and twisting, its guiding marks are so subject to change, the small buoys so frequently missing from their positions, and the 6-foot holes so uncertain, that a stranger should not attempt using this inlet except with the aid of local knowledge. The best and most up-to-date information of these Essex waters is to be obtained from the sailing barge skippers. At high water Bradwell creek is exposed to fresh winds from the NE.

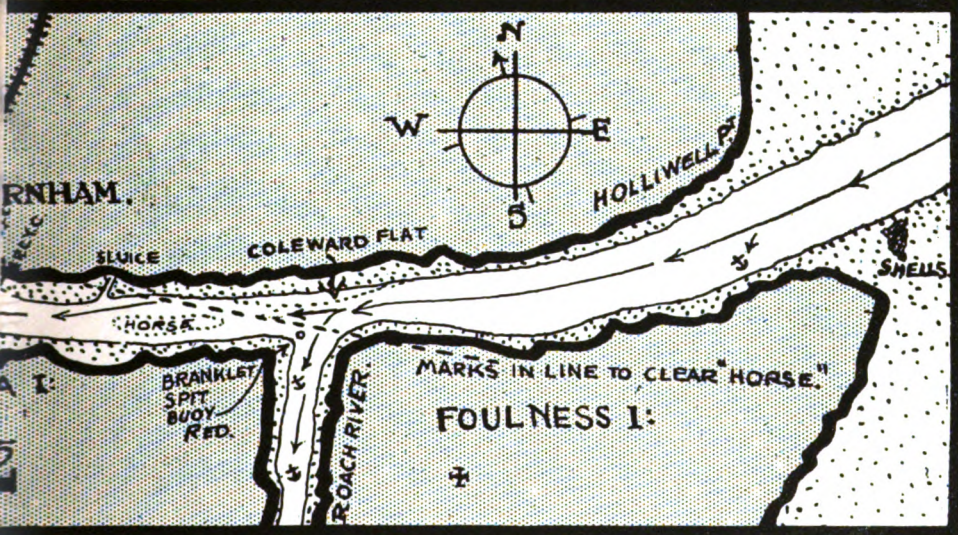
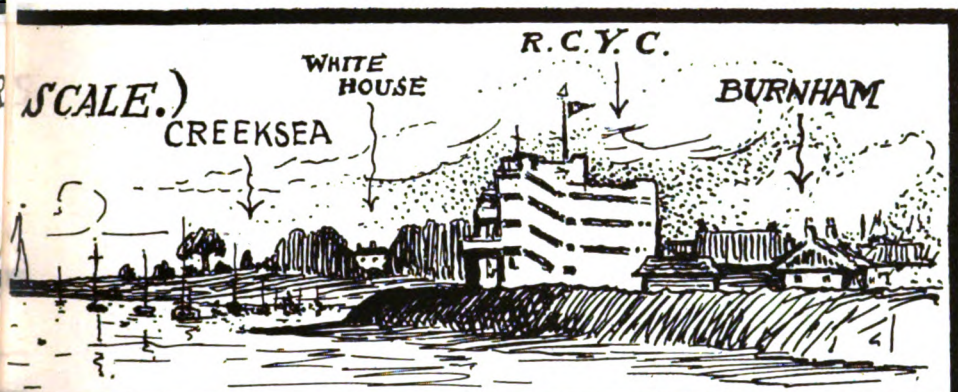
Better anchorage will be found off West Mersea. Having come up the Blackwater from the NW Knoll, leave the Nass Beacon to port, but not less than 200 yards away, for the spit runs out considerably. If at all nervous, it is better to keep the lead going and creep in along the northern shore of the Blackwater, which is here the southern side of Mersea

RIVER CROUCH (TO LARGER

LEADING MARKS TO
CLEAR "*THE HORSE*".

KEEP TO THE NORTH OF A LINE DRAWN
THROUGH "*POINT OF LAND*" BELOW R.C.Y.C.
AND "*WHITE HOUSE*" AT CREEKSEA.





Island. When the Nass Beacon bears SE, you are well inside the area known as Mersea Quarters, and a stranger may find it advisable to anchor. A more sheltered berth, especially when the wind is easterly, can be obtained after sailing past Packing Marsh Island up Thorn Fleet, and then anchoring near the Gut (which gives access to the anchorage off Mersea village, locally known as the "City"). Packing Marsh Island is characterized by some sheds.

The Raysand Channel, connecting the Blackwater with the Crouch, should not be attempted by strangers except in clear daylight and with plenty of tide. Its least depth at L.W. Springs has varied during the last quarter of a century, but to-day half a fathom about represents the shoalest. Neaps, however, rise 10 feet 6 inches, and Springs 14 feet 6 inches, so that at half flood you can be always sure of more than 8 feet. The Raysand Channel passes between the mainland on the West and the Buxey Sands on the East. From the NW Knoll steer for the Knoll light buoy, thence alter course to leave the North Buxey buoy (red and white chequered can) to port. Thence steer to pass half a mile westward of Buxey Beacon, which consists of a mast 30 feet high with crosspiece, forming a T-shape. From this half-mile distance steer SW $\frac{1}{2}$ S to pass nicely to the westward of the West Buxey light buoy (spherical, red and white horizontal stripes).

You are now at the entrance to the River Crouch, with Foulness Sand to the southward. The low, marshy, inconspicuous scenery affords no assistance, yet a careful compass course from the West Buxey buoy, together with the use of the lead, will bring you between Holywell Point and Foulness, but beware of the flood setting you too far to the southward. You are now in the Crouch and can sail right up. In fine settled weather, if stopping only till to-morrow's tide, anchor South of Holywell Point towards the Foulness shore yet not too close. Proceeding up river, the Roach will be

passed on the southward. An excellent anchorage, secure from easterly and westerly winds, is found a short distance up the Roach on the western side. Beware of the Branklet Spit which projects from the NE corner of this western bank of the Roach. A small white buoy, which marks the Branklet extremity, should be left to port when coming up the Crouch towards Burnham.

There is a "horse" one mile West of the Roach almost in the middle of the Crouch, and this shoal has not more than 3 feet of water at L.W. Springs. Some yachtsmen prefer to leave it by the South channel: others by the North. When using the latter, it will be noticed that the following marks will clear the shoal: Keep to the North of an imaginary line drawn through the point of land below the new Royal Corinthian Yacht Club building, and the white house at Creeksea. (This will be recognized by the sketch in accompanying Plan.)

Strangers will find the anchorage off Burnham so congested with yachts and moorings that it is better to bring up either half a mile below the town, or about a mile above the Ferry abreast of "The Cliff" between Creeksea and Althorne creek.

When leaving the Crouch, and bound out by the Whitaker Channel, the northern shore is marked by the West Buxey light buoy and the South Buxey red conical buoy. The South side has the Ridge (red and white chequered can) buoy with staff and cage topmark; next the Whitaker Spit beacon (with its cut-off cone top) which is 46 feet high. The eastern extremity is marked by the Whitaker Spit spherical (black and white horizontal striped) light buoy.

The Wallet Spitway, NE of the Whitaker beacon, is a handy channel connecting the Whitaker Channel with the Wallet. Its width, position and depth are variable, but there is roughly $\frac{1}{4}$ mile breadth and about 8 feet can be relied upon at ordinary low water, though at Equinoctial Springs with

a fresh SW wind there will not be more than 6 feet. Sailing barges and (in summer) the pleasure paddle-steamers, use the Spitway frequently, though the latter set up a noticeable quarter-wave. Small craft crossing about the end of the ebb in boisterous weather will find any ugly short sea. The channel is not exactly in line with the two buoys, but slightly to the eastward; the southern end being marked by the "Swin Spitway" black bell buoy, and the northern end by the "Wallet Spitway" (red and white horizontal striped) spherical buoy with staff and diagonal cross topmark.

At Brightlingsea Spring tides rise 14 feet. Neaps rise 10 feet. For time of high water add 38 minutes to H.W.D.

At Heybridge Basin Spring tides rise 12 feet. Neaps rise 8 feet. For time of high water add 1 hour to H.W.D.

At Burnham Spring tides rise 16 feet. Neaps rise 11 feet. For time of high water add 54 minutes to H.W.D.

Crossing the Thames Estuary. When bound from Harwich to Ramsgate across the Thames estuary one can proceed either : (1) By the Medusa Channel, or (2) by the Cork and Sunk lightships. During daylight hours either is practicable, but by night the Cork and Sunk route will be preferred.

A broad channel exists from the Sunk lightship to the SW and well marked by the Gunfleet lighthouse, the Barrow Deep lightship, the Middle Barrow lightship, in addition to the buoys. By working your tide and using caution, it is possible to take some short cuts over the sands with the utmost convenience.

Thus, a small craft with a fair wind by day can get from Pin Mill to Ramsgate in about 9 hours by working tides and avoiding detours. From the Stone Banks buoy steer for a position half a mile (but not more) to the SW of the NE Gunfleet buoy, timing your arrival there to be about 3 hours before H.W.D., so as to get the stream running to the SW.

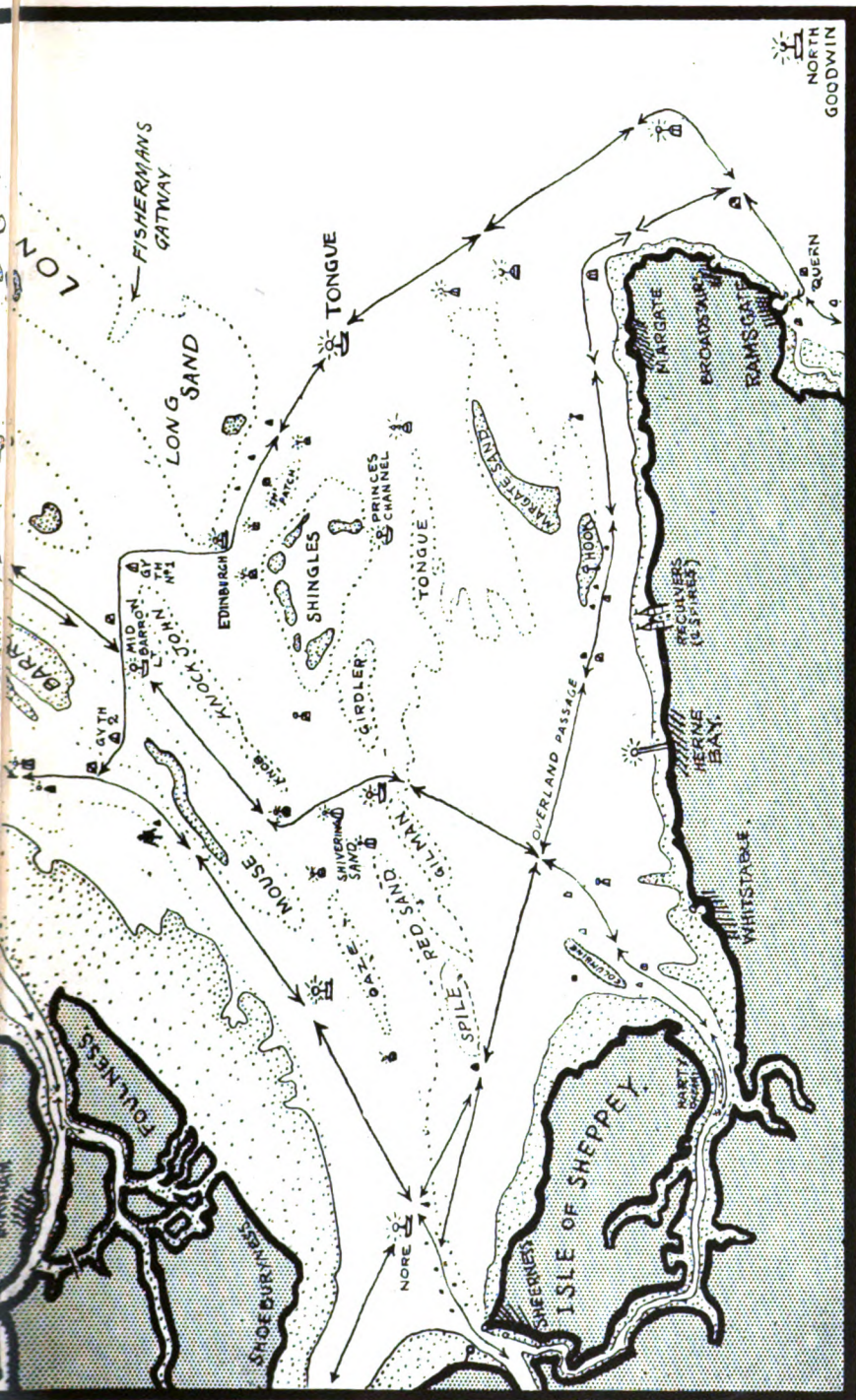
You have now 15 miles to cover before altering course, and the tide is still favourable till the time of H.W.D. So, having passed the Gunfleet lighthouse (which is a red tower 41 feet high, built on piles, having a red light, fog bell, and also a wireless telephone for life saving when occasionally vessels get blown on to the Gunfleet sands), another $4\frac{1}{2}$ miles bring you to the Barrow Deep lightship.

The latter will easily be recognizable by its red hull with light-tower amidships, and has its mast aft. Leaving this vessel to starboard, carry on down the Barrow Deep keeping a careful tally of the buoys, and before you get to the Mid Barrow lightship (red hull, light-tower amidships) it will be high water. Under ordinary circumstances you can cut across the sands from the vicinity of No. 8 Barrow buoy, and make for the Edinburgh lightship just as the tide begins setting to the North and NE one hour after H.W.D.

The course from the Edinburgh lightship (red hull, tower amidships with half globe base uppermost at masthead) is towards the Tongue lightship (red hull, mast with ball at top), which can be left a mile to the North. Already the Kentish shore and the North Foreland will have been dimly visible for some time. Give the latter a wide berth, after which the Broadstairs Knoll buoy will be left to starboard, and the Quern to port. Ramsgate harbour will now be seen ahead.

By the time you are off the Tongue the tide will be setting NNE. Off the NE Margate Spit the tide runs North at 2 hours after H.W.D., NE at 3 hours after, and E by S during the fourth and fifth hours. At the sixth hour after H.W.D., it is running in a south-easterly direction. Expect to have the tide against you after rounding the North Foreland, since the stream off Ramsgate runs SW from 5 hours after H.W.D. till one hour before, when it turns NE.

A word of caution is necessary regarding the short cut between the Barrow Deep and the Edinburgh lightship.



As the buoyage system across the Thames Estuary is subject to periodical modification, the above courses should be considered in conjunction with the latest Admiralty charts.

This should not be attempted in foggy weather, or with a heavy sea. The soundings vary in different years, so the latest information must be obtained concerning the buoys. Generally, however, small craft will find some conical buoys marked with green and yellow vertical stripes, valuable aids hereabouts in laying a course. It should be mentioned that these are placed not for navigation but for the guidance of vessels employed depositing sludge. The exact passage can be found by reference to the latest chart, the position of the buoys, and the use of the lead; though at high tide for a vessel drawing 6 feet there should be no cause for anxiety.

If bound the opposite way (Ramsgate to Harwich), it will be convenient to come up the Edinburgh with the flood, then cross the sands at high water, and so take the ebb tide all the way down towards the Sunk or NE Gunfleet. The positions of the Edinburgh and the Mid Barrow lightships will be found of great assistance.

Yachts bound South from the Wallet may pass via the Spitway, the Swin Middle lightboat (red hull, with iron lattice structure, and lantern on top), the Mid Barrow (red hull, light-tower amidships), thence across the sands towards the Edinburgh as indicated. From Burnham a cut across the Whitaker Spit can be made when the Whitaker beacon bears South and the tide has reached half flood. Make for the Nore lightship if bound up the Medway. The Overland Passage is the shortest route from the Medway and East Swale to Ramsgate, but if there is much wind about the shallowness of this channel causes ugly short seas for a small yacht. It is well marked with buoys and the Hook beacon, whilst the two-spired Reculvers towers, and Margate pier will easily be identified. Thames barges regularly use this passage, which in summer time is frequented daily by the London pleasure steamers. On the way there is an excellent anchorage up the East Swale off Harty Ferry, secure in all

weather. This is particularly convenient when bound up from Ramsgate. By putting in here for the night, and cutting across next morning to the Girdler lightship, the whole of the NE-going ebb can be carried to great advantage through the Barrow Deep towards Harwich.

With a SW wind and fair tide short work will be made of the trip from the Swale to the NE Gunfleet. But when bound from Ramsgate for the Swale, and a fair tide has been picked up at the North Foreland, the wind often has a way of coming westerly along the land and kicking up a nasty fuss against the flood. Under those circumstances the easily entered Swale becomes very welcome. At night time you can just feel your way in past the buoys, using your lead, and bring up off Shellness; due regard being paid to avoid the Columbine and Pollard banks. Beware, also, when rounding the reach approaching Harty Ferry, to keep well in the southern bend so as to avoid the shoal which runs out from the North and is apt to entrap strangers.

At Harty Ferry Spring tides rise 16 feet. Neaps rise 13 feet. For time of high water add 45 minutes to H.W.D.

Ramsgate. In approaching Ramsgate from the North, the Broadstairs Knoll buoy will have been left to starboard, whence a course will have been laid for the Quern buoy, which is a black-and-white chequered can and must be left on the port hand, i.e. to the southward.

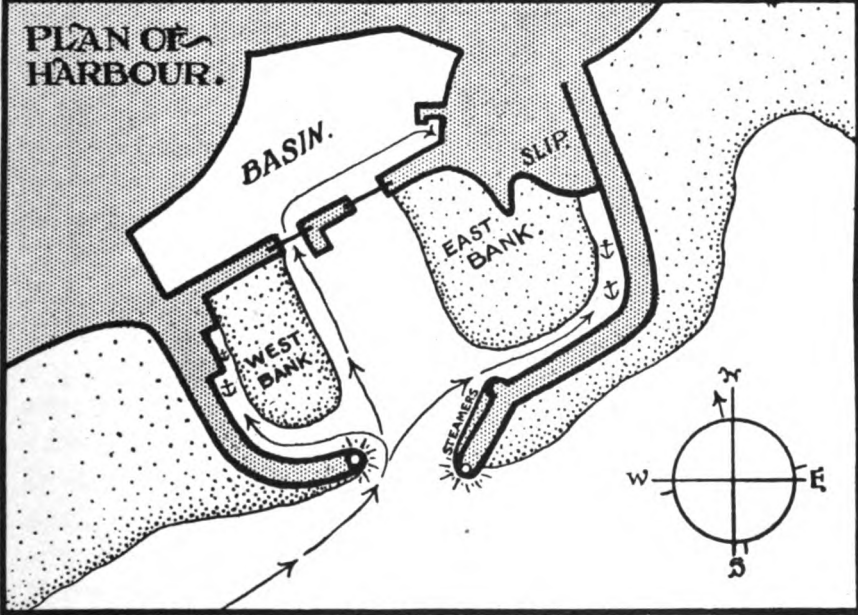
Now stand on towards the harbour mouth, whose appearance is shown in the accompanying sketch. On the West side will be noticed almost at the pier end a circular granite tower which is the lighthouse. On the East side is another pier, immediately inside of which is the berthing place for the London excursion steamers. There is also a fog bell here, and both piers exhibit lights.

The three main considerations to be borne in mind are :
(1) The strong tide which sets athwart the mouth, (2) the

RAMSGATE.



PLAN OF HARBOUR.



crowded condition inside and restricted manoeuvring area at low water, (3) the baffling character of the winds.

By origin Ramsgate is an artificial harbour designed so that in the olden days of sail, vessels in distress could run here for safety and even pile themselves on the extensive mud banks. If the Downs became untenable, there was always this port of refuge. Hence the inscription "*Perefugium Miseris*," which will be found to this day carved on the western lighthouse. Small yachts, having come up Channel from the westward, and been caught in a hard south-westerly blow, will find it safer to avoid Dover and run through the Downs into Ramsgate, the entrance being so placed as to make the breeze from this direction a fair wind till within the piers.

With regard to (1), this applies chiefly to the NE-going tide, for which reason the western pier must be hugged quite close, or there will be a risk of being smashed against the opposite side. The width here is about 200 feet, but is for practical purposes lessened when a pleasure steamer (indicated in sketch) is at her berth. In approaching after coming from the North, do not enter until the harbour is seen well open, even if the tide is setting to the SW. The Bermudian-rigged yacht in sketch is far enough to the eastern side for those conditions, but would need to be much nearer to the western pier if the tide were running NE.

With regard to (2), in spite of the fact that Ramsgate outer harbour consists of some forty acres, the anchorage is restricted to (a) the eastern gulley, (b) the western gulley. Except for these and a wide channel in the centre, the remainder of this harbour is all mud at low water. Therefore, having passed the western pier, turn sharp to port for the west gulley, or to starboard for the eastern gulley. The former is preferable, and the bigger craft will be directed to bring up soon after the lighthouse is abeam. Smaller craft will prefer to go further up to the position where one

of the two anchors is shown, choice being determined by depth. This is the snugger berth.

The eastern gulley is somewhat exposed to wind and sea coming in from the SW, but yachts of even 40 tons (T.M.), drawing nearly 10 feet, berth here though not too far down the gulley. Small craft are directed past the bend of the elbow, as shown by the two anchors. At high water, when the banks are covered, this part of the eastern gulley may be so uncomfortable that it will be unbearable. The custom of the port is to secure from bow and stern, and lay off a kedge anchor with a breast warp so as to keep the yacht from banging against the concrete wall: but this cannot always be prevented, and the amount of rolling, even in the western gulley, will sometimes surprise a stranger. There is the further nuisance of having to slack up these offlying warps, at any moment, to allow of other craft passing into either gulley. It is not less an inconvenience for the yacht entering or departing.

Unless intending to remain only a night, it is better to make a job of it and berth in the basin or inner harbour. Enter by the western gates, which are opened from 1½ hours before local high water until high water. Yachts usually berth at the North side thereof, but the quietest spot is at the eastern extremity as marked in plan. A visit should first be paid to the Inner Harbour Master and permission obtained. Adjacent to this basin are every facilities, including ship chandlers, motor mechanics, sailmakers, shipwrights. The basin is moderately clean, but there is one drawback. If bound down Channel, you must come out of dock one tide ahead; for the tide turns to flow SW at 5 hours after H.W.D., whereas the gates open conveniently if bound northwards. For the tide begins running NE about 1 hour before H.W.D.

With regards to (3) it will frequently be noticed that the yacht burgees in the two gulleys are blowing in different

directions. The high land and high piers are apt to increase the difficulties of a yacht under sail entering at low water. Whilst needing plenty of way to get in out of the tide, she must lower canvas smartly to check speed. In the summer there will always be noticed a local man in his rowing boat ready to run a line off immediately inside. Warps should so be secured to the iron rings in the wall as to allow the ropes to be cast off at any state of the tide. Therefore make a bowline.

Land by climbing up the lofty wooden ladders.

The depths of the gulleys vary according to circumstances, and the harbour bar is subject to the influence of gales. There are buoys on the East and West banks for securing temporarily whilst waiting for the basin gates to open. If local help is required, inquire of the lighthouse keeper on the western pier. When a red ball is hoisted on the hill at the North side of the basin, there are at least 10 feet of water between the outer pierheads. When an arm from the flag-staff is shown, and a bell is rung several times quickly during the day, it means that a vessel is about to enter, so keep clear. Especially is this to be noted in the summer when the above-mentioned pleasure steamers call at Ramsgate.

After being bombed from the air and shelled from the sea during the War, Ramsgate is no longer an important fishing harbour, though a few smacks still survive. Keep a smart lookout for such vessels coming in or out of the basin at tide time.

Spring tides rise $15\frac{1}{2}$ feet. Neaps rise $12\frac{1}{2}$ feet. For time of high water add 25 minutes to H.W.D.

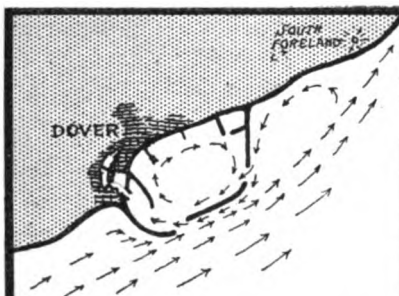
CHAPTER III

DOVER TO POOLE

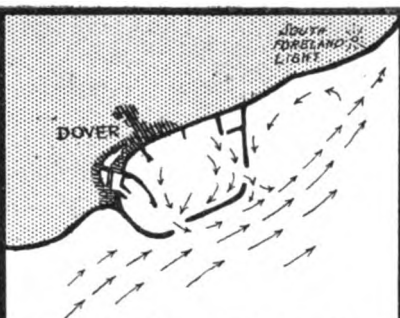
Dover. Although millions of pounds were spent during the early part of the present century to create a vast naval harbour—and during the War Dover was one of the most important of our bases—to-day it remains a scene of sad isolation, for it is the most inhospitable of harbours in anything but the finest weather. In a southerly gale the outer harbour for all craft up to the size of destroyers is most uncomfortable; even between the Prince of Wales and Admiralty piers there is a persistent roll on the quietest of occasions.

But the worst feature is to be found in the currents. Owing to the strong tidal stream of the English Channel having been interrupted by the projection of the long breakwaters so far from the shore, some awkward complications have to be reckoned with or a vessel will be set on to the very obstruction she has sought to avoid. Some years before the War it was customary for one line of transatlantic steamers to make this a port of call; but the tricky currents caused such accidents and narrow escapes in entering, that the liners gave up calling.

There are two entrances—eastern and western, and it should be remembered that under all circumstances the eastern is preferable, especially for small and moderate-sized craft. With the combination of a SW-running Channel tide and a SW wind, there is always a nasty joggle off the western entrance. If it is blowing fairly freshly, these “ripples” (otherwise the “race”) will be found quite

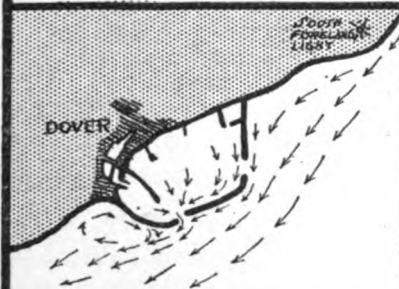
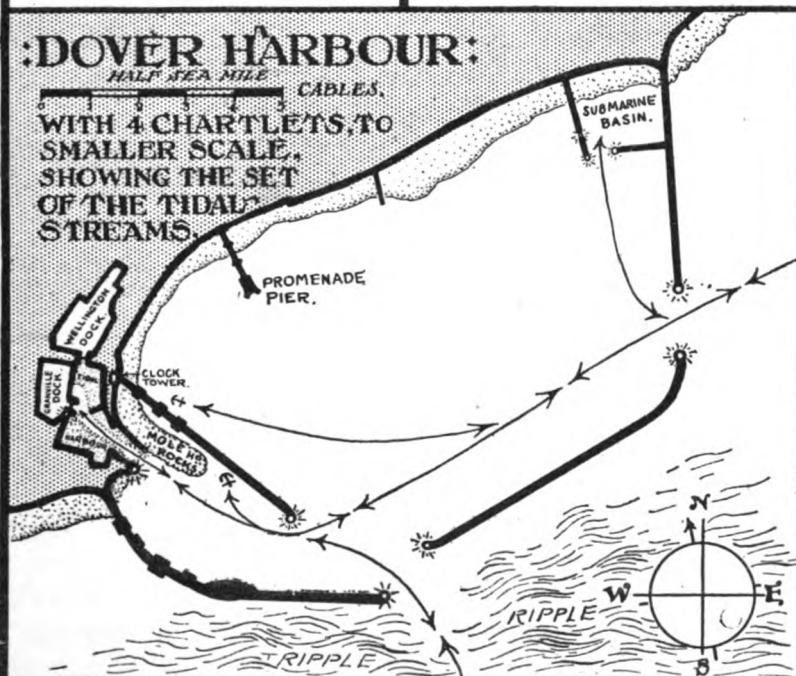


FOR ABOUT 2 HRS BEFORE H.W. DOVER,
WATER RUNNING INTO HARBOUR.

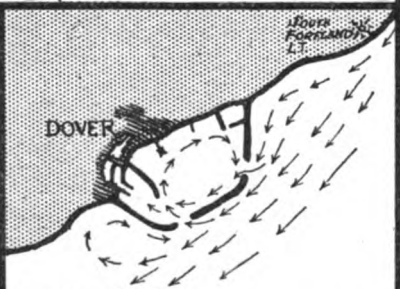


FOR ABOUT 3 HRS AFTER H.W. DOVER
WATER RUNNING OUT OF HARBOUR.

:DOVER HARBOUR:



FROM
ABOUT 3 TO 6 HRS AFTER H.W. DOVER,
WATER RUNNING OUT OF HARBOUR.



FROM
ABOUT 6 TO 2 HRS BEFORE H.W. DOVER,
WATER RUNNING INTO HARBOUR.

unpleasant : but in a wind of say Force 7 there is so confused a sea that a 25-ton yacht might be in danger. A sailing craft running before a SW wind and anxious to seek shelter quickly often has the following experience. Off the western entrance she gybes in the midst of the turbulence and comes on a northerly course, bringing the crested seas menacingly on her port beam. The tide is setting her hard to the eastward, so she proceeds to hug the western pier. But (if it happens to be about 2 hours before high water) the local harbour current sets her on to this western pier. Amid the consideration of wind, tide, waves, current, and narrow entrance, with the further possibility of railway steamers coming in or out at high speed, the yachtsman has to think and act quickly. Keep plenty of way on the ship, whether under sail or under power ; since there is ample room for manœuvring within the harbour.

If running up Channel in dirty weather with fair wind and tide, it is still safer and simpler to avoid the western and choose the eastern entrance, although this will mean a slightly longer distance. It may require some personal determination not to be lured in by the western opening, but, except under most favourable conditions, small vessels should generally choose the eastern way. The snuggest anchorage is to be found at the NE corner known during War days as the Submarine Basin.

Should the SW winds blow hard for a day or two, the best berth is on the North side of the Prince of Wales pier, but as far in towards the shore (near the clock tower) as the draught of water will permit, and not too far from the shelter of the pier, which incidentally has open viaducts. If stopping only a night, a more convenient anchorage exists on the South side of that pier. Both of these berths are indicated in the accompanying Plan. The advantage of this second anchorage is that if the weather becomes intolerable, you are well placed for running into Granville Dock, the gates of

which are usually open from about 1 hour before high water till $\frac{1}{2}$ hour after. Do not anchor in the fairway leading to the Dock, and avoid the Mole Rocks to the NW ; but bring up midway between the fairway and Prince of Wales pier where a tug is usually lying alongside. Granville Dock is extremely convenient if one wishes to leave the yacht and run up to town till the next week-end. Its proximity to the railway station, shipchandlers, and shops, will be appreciated. On the other hand, so much dust blows off the road that it is difficult to keep the decks clean.

If permitted, the best berth inside this dock is sharp round to port on entering, where you may be able to tie up alongside some local vessel.

Reference to the four chartlets in the accompanying Plan will simplify the act of entering, and indicate direction of the current to be expected, bearing in mind that the eastern entrance has not merely a weaker current but one that sets more truly. During the two hours preceding high water the current flows East and the harbour is being filled through both entrances by the Channel stream. But it will be observed that a vessel coming in at the western entrance, and hugging the western pier to avoid being set on the eastern detached breakwater, would be caught on her starboard bow by the current which has swept through the harbour and is now emerging at this entrance. At this period of the tide the western entrance is undesirable, whilst the current across the eastern mouth sets fair and can be allowed for.

For about three hours after high water the harbour is emptying itself at both mouths pretty strongly, but at least it sets fairly in both cases. Thus, with plenty of power in the ship and not too much sea about, a vessel could force her way in by the western entrance. From about three hours to six hours after high water the harbour is still emptying, but the water comes out almost entirely from the western entrance, inasmuch as the tide scours round the beach

SW of the South Foreland and past the eastern entrance in such a manner as (so to speak) to dam the latter. The current at the western entrance is therefore now very strong, but uncomplicated. The fact that in the offing the Channel stream may be still running East while the inshore tide is running West causes rough water to extend for about a mile seaward. A backwash from pier and breakwater with a SW wind completes the ugly "race."

From about six hours after, till two hours before high water, although the Channel stream is running to the westward, the harbour is during these four hours filling again, and this is a good time for entering, the current at each entrance setting in fairly. The best time for entering Dover harbour is half an hour before high water when the tide is slackest. If bound West, leave Dover during the fifth hour after high water: if bound East, leave during the hour immediately preceding high water.

Spring tides rise $18\frac{1}{2}$ feet. Neaps rise $14\frac{1}{2}$ feet.

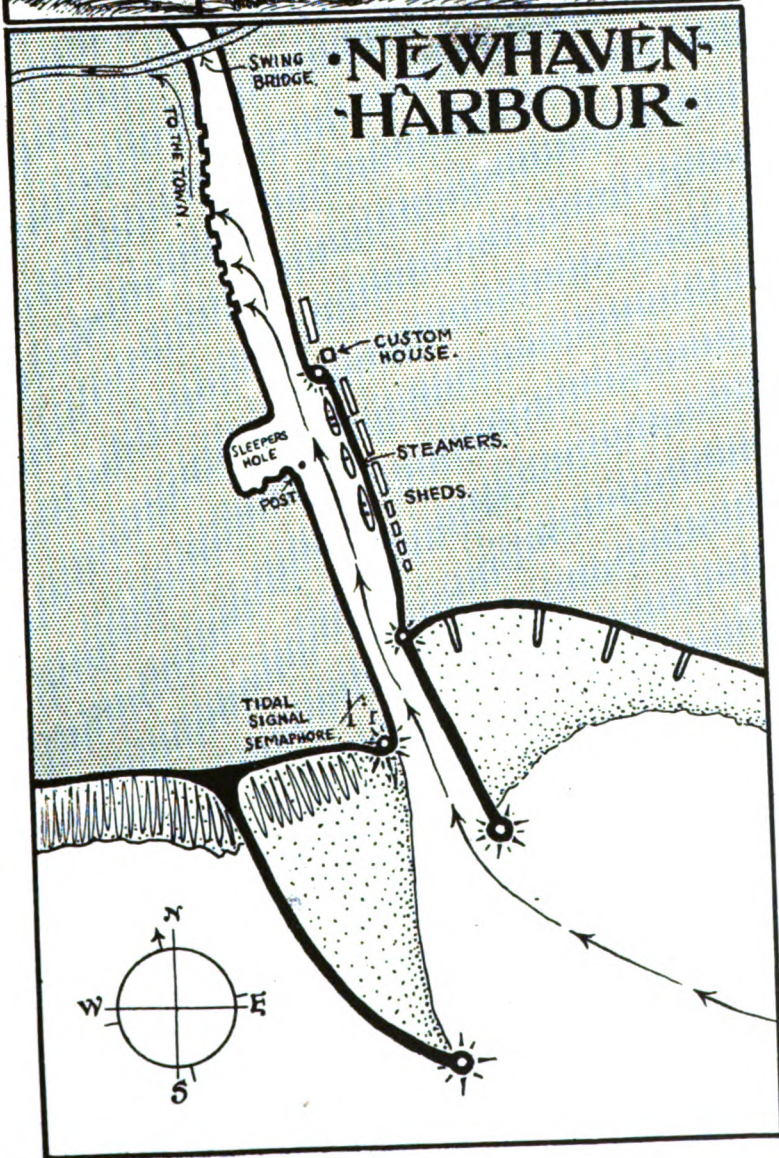
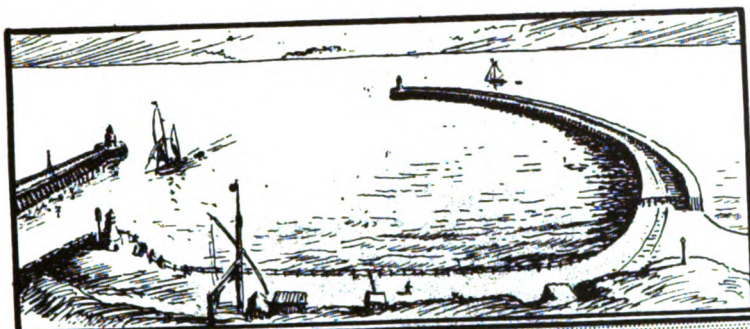
NOTE. Yachtsmen are advised to use neither Folkestone nor Rye.

Newhaven. Coming West from Dover, Newhaven is the first available harbour inasmuch as Rye is inconvenient and the long-talked-of harbour at Hastings never came into being. It is a long drag for small craft, especially with a head wind and the possibility of dirty weather before reaching Beachy Head. The yachtsman will so arrange his time as to carry a fair tide round the latter; and, by standing a mile South of this headland, will avoid the disturbed water which here can be very unpleasant.

Thence away to the NW beyond the chalk cliffs lies Newhaven in the hollow, and not immediately recognizable to a stranger, especially if any mist hangs over the Downs. But Seaford, with its houses on the waterfront, will soon come into view and then the Newhaven breakwater, piers,

lighthouses, with possibly a steamer entering or leaving. This breakwater comprises a great curve of concrete, 800 yards in extent from shore to lighthouse. If approaching Newhaven from the westward towards low tide with a fresh SW wind and heavy sea, give the breakwater lighthouse a good wide berth, for there are not more than about 3 fathoms, there is a tendency to silt, and the waves set up can be really alarming. In gales of wind from SW more than one vessel has got so far only to be driven ashore on the eastern side between Seaforth and Newhaven's eastern pier. Under the conditions mentioned, keep away from the breakwater end till the harbour entrance is well open, look out for some odd wave breaking on the beam, watch your gybe, but avoid being set too far to the eastward. It is the combination of (1) the sudden change from deep water to shoal, and (2) the seas rebounding from the breakwater, which causes all this awkward liveliness. A motor yacht, as she alters course to the northward off the breakwater with a fresh westerly wind, will suddenly roll heavily.

But in normal weather there is nothing needed except ordinary prudence, vigilance, and regard to the signals. Strangers should be reminded that although the area between the breakwater and southern end of the West pier may be covered with water and appear most tempting for a temporary anchorage, this area must be avoided. It is shallow and prohibited. Keep a lookout for a dredger which most probably will be working anywhere between the breakwater and piers. She shows a white flag which indicates the side on which she should be passed ; but especially be alert for the Southern Railway Steamers which run to and from Dieppe. A reference to the railway time-table will give some idea of their hours for entering and leaving. The narrowest part of the harbour is only 60 yards, so that there is not too much room for vessels to pass. These steamers are in a hurry, quickly gather speed, and even stream the log whilst coming



down harbour. As will be observed from the Plan, they berth on the eastern side in a recess opposite a small camber that is known as Sleeper's Hole. At the southern side of Sleeper's Hole is a post, to which a hawser is temporarily attached every time the Dieppe packet goes out. This wire stretches right across from the eastern side and is used by the steamer for hauling off from out of her berth. But, after a minute or two the steamer slips the wire and departs, leaving no obstruction.

On entering, keep in mid-channel and you will be first hailed ("Name of yacht?" "Where from?") on passing the southern end of the West Pier. Here the tide signals are made from a flagstaff by hoisting black balls. As, however, there is nowadays not less than 8 feet in the harbour, this scarcely affects small yachts. But pay heed to the information conveyed by the semaphore which is placed near the flagstaff. In appearance resembling an ordinary railway signal, this semaphore has its arm *up* when the passage between the piers is clear for entering. No vessel during that period may leave harbour. If the arm is *lowered*, vessels may leave but not enter. Thus, if you have come in from the sea, and you find the arm dropped, beware of a steamer suddenly coming out. By night a white light from the same semaphore shown seaward means that the passage between piers is clear. A red light to seaward shows that the passage is obstructed.

After passing up the harbour, the yacht will be again hailed abreast of the Customs House and directed to one of the berths on the western side as marked by arrows in the Plan. These are stagings and have numbers. Moor fore and aft, with lines ashore. In summer there may be as many as four or five yachts secured abreast of each other. Climb ashore by the wooden ladder. A path leads thence to a not very interesting town though there are plenty of shopping facilities. Oil fuel can be brought direct to the staging by arrangement

with the local agents; and close at hand by the staging will be found a motor mechanic as well as a boat-repairer. Drinking water is likewise handy.

This is a comfortable harbour in which to shelter during all weathers, and is very convenient if one has to reach London by railway. There is a good train service, one can land at the steps by the Customs House opposite the yacht, and the station is within a few yards. There is also an hotel (adjoining the platform) where you can get a meal and hot baths. Sleeper's Hole will be seen to contain a number of small yachts, and its convenience is very obvious. But visiting craft are not allowed to use that anchorage normally, and special permission must have been obtained from the Southern Railway (Marine Department) previously. It is the best spot wherein to leave an unattended yacht.

There is a swing-bridge at the northern end of the harbour, the tide flows at no great speed, and there is no objection to letting go anchor before running out warps to the staging and dropping into a berth. If buying a new dinghy from another port, and wishing to send it overland by train, Newhaven is most suitable for its reception. It can be removed on to the quay and launched within a few yards of the yacht. The worst drawback to berthing at the stages is the dust which blows on to the decks. Always there is plenty of shipping coming in and out to keep one interested; but, if weather-bound for a few days, there are plenty of suitable walks. A glorious view of the English Channel from the Sussex Downs can be obtained by walking twenty minutes South from the staging. On the opposite side Seaford can be reached at low tide along the sands, or by train.

It should be mentioned that the Breakwater light is a double occulting every 10 seconds. It also has a fog reed blown mechanically (one blast of 3 seconds every half minute). Both the East and West Piers have lights, and the West Pier has a fog bell.

Spring tides rise 19 feet, Neaps rise 15 feet. For time of high water add 5 minutes to H.W.D.

Shoreham is the port for Brighton, and years ago the packets used to leave here for France. Yachtsmen making a passage down Channel will find this harbour less convenient than Newhaven, yet Shoreham has in the Southwick Canal good shelter for yachts of all sizes during the year round. It is within easy distance of London, there are all facilities for fitting out, for engine overhaul, and obtaining supplies; and one can, if desired, live aboard during the winter. On the other hand, the entrance is not too easy, the bar is liable to shift, and the harbour itself at the eastern arm leading to Southwick Canal dries out.

Do not place implicit confidence in the chart, since after heavy onshore gales there is a tendency for the entrance to silt up. In approaching from the West a conspicuous landmark is Lancing College. Enter between two piers, East and West, the opening being 176 feet wide. You will then see the Middle Pier within, separating the eastern arm of the harbour from the western.

When coming in between the East and West Piers beware of eddies and cross-currents. The best time to arrive is at high water, when you should keep over on the West side if there is still any flood. Give the coast a berth of a mile before approaching the pierheads, and watch how the tide is setting as you come in, being ready to meet it with the helm. This last precaution is necessary likewise when passing the Middle Pier.

The leading marks are the iron tripod structure of the East Pier light in line with the white obelisk on the Middle Pier; or, by night, the light of the latter in line with the High Light, which is shown from a grey stone circular tower on the North shore at the rear, these two lights bearing North by East. Whilst the High Lighthouse exhibits a flashing light,

the Middle Pier shows a fixed green light when there is not less than 8 feet on the bar at flood tide ; a fixed white light when not less than 11 feet (flood or ebb) ; a fixed red light when it is high water slack. By day if either one or two or three balls be hoisted at the masthead or yardarm of the Middle Pier, a small yacht can always enter since there will be not less than 8 feet and a rising tide. As soon as a pendant goes up it will be understood that the tide is no longer rising. If possible the harbour should be entered just as the pendant is hoisted to the masthead. Auxiliary craft will find it convenient to enter under power. (Strangers are warned against mistaking the large groyne, or breakwater, West of the West Pier for the latter itself.)

If intending to remain for some time, leave the Middle Pier close to port and proceed up the eastern arm, which is well marked by black buoys, and has a depth of 7 feet at half-tide. This leads to the Southwick (so-called) Canal (really a basin) entrance, where the gates open at 1 hour before high water. A suitable berth is usually to be found at the western end. Harbour dues are charged. Railway station near to harbour.

Spring tides rise 18 feet, Neaps rise 13 feet 6 inches. For time of high water add 10 minutes to H.W.D.

Littlehampton, though not so easy of access as Newhaven is less difficult than Shoreham. If a small yacht, bound West through the Looe Channel, is threatened by fog or a falling glass, Littlehampton is a capital harbour in which to enter and remain for a while. It has the great advantage of being clean, healthy, with every convenience as to repairs of all kinds. The River Arun flows out between the two piers of which the West projects some 400 yards further than the East Pier. The entrance is narrow but will readily be identified after having passed Worthing. The East Pier is continued by dickerwork for 460 yards visible until half flood.

When coming in at high water, note that the southern end of the latter is marked by a beacon consisting of black staff with diamond, whilst the southern extremity of the West Pier is marked by a beacon consisting of a staff and barrel having red and white stripes. Both the West Pier and the East Pier extension dry out at low water. Do not, in fine weather, attempt to enter until half flood when there should be about 7 feet of water in the approaches, but when once well within the piers this depth will be increased by as much as 6 feet, or slightly less up-harbour. During hard onshore winds it would be better to take this harbour about the time of high water.

A yacht arriving towards low water time should keep well off the shore, and in fine weather could anchor $1\frac{1}{2}$ miles South of the harbour entrance provided there is not too much swell. Ordinarily the easiest time for entering Littlehampton is at 1 hour before high water, when the strong flood tide coming from the West slackens. At Springs the flood attains a velocity of 6 knots. If the wind is northerly, a yacht with auxiliary power will find it preferable to enter with engine. Having passed between the above-mentioned beacons, be alert for the eddy which comes off the East Pier extension.

The marks for reaching within the mouth from seaward are the two lighthouses on the East Pier in line bearing North. These consist of a High Light and a Low Light, 26 feet and 19 feet high respectively. Keep over to the East side. Whenever one, two, or three black balls can be seen hoisted by day at the masthead or yardarm near the inner end of the East Pier a small yacht can enter with some confidence, knowing there will be at least 7 feet on the bar.

In recent years vessels entering have been compelled to bring up near the Harbour Master's Office on the starboard hand for instructions as to berthing. The harbour widens out before reaching the swing bridge, but there is not much

depth at low water. Alongside No. 3 berth a yacht of 5 feet will barely lie afloat at L.W. Springs : but there is perfect shelter and no swell runs up. Harbour dues are charged. All kinds of stores and oil are procurable. Yacht building yards.

Springs rise 16 feet 6 inches, Neaps rise 12 feet. For the time of high water add 20 minutes to H.W.D.

The Looe Channel is of great convenience to small craft, and saves the longer route by the Owers. At the East entrance the stream goes West at $1\frac{1}{2}$ hours before H.W.D. until $5\frac{1}{2}$ hours after H.W.D., when it turns East. But the Looe should never be used in thick weather, or at night. The tides are strong, and against a hard breeze kick up a very nasty sea. Whilst it is possible to beat through this channel, full daylight is requisite and due regard must be paid to the shoals. There is a good deal of traffic round the Owers though the Looe is chiefly used by coasters and yachts.

Chichester Harbour is one of the three openings to an interesting series of inland waters, which are navigable to small craft. The other entrances are at Langston and Portsmouth.

Chichester Harbour entrance lies about $5\frac{1}{2}$ miles NE from Dean Tail Buoy and $6\frac{1}{2}$ miles NW of Selsey Bill, but from the mouth the water is shallow for two miles seaward. In bad weather from the southern quadrant do not run for Chichester Harbour as the sea breaks heavily, causing a wide expanse of white water. It is also inadvisable to make the attempt on the ebb. More than one fatal accident has occurred through imprudence. Whilst a pilot is not necessary even to a stranger, the utmost precaution should be taken, and the time selected should be not before half flood, when about 5 feet of water can be expected outside.

The Bar frequently changes, and the soundings quickly

drop from 3 fathoms to as many feet until abreast of Eastoke Point when the channel on the West side becomes deep. The East side is all shoal, so that the entrance is quite narrow, and the port shore must be kept aboard. Whether coming from the East or the West, do not be in any hurry to turn in towards the harbour, but get well over to the West so as to bring the entrance to the East of North, thus avoiding the East Pole Sands on one side and the West Pole Sands on the other. Have the sounding lead going as you stand in towards Eastoke Point, and see that the tide does not set you too far eastward. The tides run very strongly into the harbour, the flood making for 7 hours until about the time of H.W. Portsmouth, and then ebbing for 5 hours.

The Treloar Hospital is a conspicuous white house between Eastoke Point and Sandy Point, and will be passed fairly close, a good course to steer being NNE which will lead past dangers well into the harbour. If at all in doubt, keep well over to the hospital shore, for the water is deeper this side. The ripple to the eastward will give some indication of the Winner shoals blocking up the other two-thirds of the mouth. If you are late on your tide, and the ebb has started to run, and you have no engine, let go anchor at once and wait for the flood. There will be from 10 to 6 fathoms at L.W. Springs between Eastoke and Sandy Point. The groynes on the western beach are marked by small beacons. There is a good anchorage close inshore out of the tide to the North of Sandy Point, during westerly winds, just within Mengham Rithe, a small narrow creek. If it blows from the eastward, go up Emsworth Channel, which runs roughly North and South. Anchor anywhere below Fowley Island. At low water you can land on a hard North of Fowley Island. The Emsworth Channel has a depth of 3 or 4 fathoms.

If bound up the Chichester Channel (for Bosham or Itchenor) a stranger may find a certain difficulty for the first mile, for the Stocker Sand has to be avoided to the North

and the dangerous Winner shingle bank to the southward. The North side is usually marked by buoys (not always to be relied upon) which must be left to port and not too close. Do not turn eastward until up to the North corner of Sandy Point, where leading marks are placed and must be kept in line for clearing the edge of the southern shingle bank. A course about E by S $\frac{1}{2}$ S will bring you across towards the land between East Head and Wittering. But keep the lead going, as the shoals during this crossing are uncertain and tricky. The channel then turns up to the NE, and a good mark is to get the conspicuous trees known as Stoke Clump (on the top of the Downs several miles distant) on with the fir trees at Cobnor Point. This is preferable to relying on the booms which are not always readily seen.

The channel, after passing the creek known as Thorney Channel (where there is good anchorage in 2 to 4 fathoms, the entrance being marked by a black buoy which is passed to port if going to Itchenor and to starboard if going to Thorney) turns eastward. Past Cobnor Point the northern channel runs up to Bosham, famous for its beauty. But give all corners a good berth to avoid the mud. The eastern bend brings you to Itchenor, which has become extraordinarily popular during the last twenty years. There is excellent anchorage off the latter in about 2 fathoms, but nowadays crowded.

A short distance above Itchenor the old Chichester Canal enters Chichester Harbour at Birdham, where there is now a yacht basin. Entrance is through a lock, and craft can moor alongside the bank. Chichester itself is about 3 miles away by motor-bus, and London is within 2 $\frac{1}{2}$ hours by road from Birdham.

Provisions and oil are obtainable at Bosham, Emsworth, and Itchenor.

Bring up in the Bosham Channel below the other craft, and off Itchenor either above or below the moorings.

Vessels drawing not more than 6 feet can pass at high water from Emsworth Channel through Sweare Deep via two swing bridges into Langston Harbour.

When going out of Chichester Harbour to sea, the best time to negotiate the entrance is either at top of high water or at half flood. All repairs at Emsworth. Springs rise 14 feet, Neaps rise 11 feet. For time of high water add 20 minutes to H.W.D.

Langston Harbour entrance has certain characteristics in common with Chichester, but is inferior as regards space and convenience. On no account try to make Langston Harbour with a hard onshore wind, or against the ebb, or at low water. The tide runs strongly, and the best time to enter or leave is just before high water. Not more than 2 or 3 feet can be expected on the bar at L.W. There is a black-and-white vertical-striped conical buoy on Langston Bar. The marks for entering from seaward are: Keep Haslar Hospital open of Southsea Castle till the Horse Foot and Noman's Fort are in one. Carry on with these astern till the bar buoy on the port hand is on with the middle of the harbour entrance, and enter on a course $N\frac{1}{2}E$, leaving the buoy close to starboard. Keep in the middle of the channel, then turn to starboard and anchor in Sinah Lake in 2 fathoms.

The western side of Langston entrance is marked by two beacons. The Langston Channel can be used, by working the tides, to reach Chichester Harbour via the bridges which connect the mainland with Hayling Island. This waterway is shallow and not too well boomed.

Spring tides rise 13 feet 6 inches, Neaps rise 10 feet 6 inches. For time of high water add 30 minutes to H.W.D.

Portsmouth is not the ideal harbour for yachts. On the starboard side when entering is the somewhat dirty tidal lake known as the Camber. Haslar Creek would be ideal for

small craft and has plenty of waterborne area, but permission from the Naval authorities must first be obtained. Anchorage off Gosport is more suited for big vessels than for small yachts. Porchester Lake is not so good as Fareham Lake, which has a well-boomed channel, but do not go further up than half a mile below the town. This is the best anchorage for small craft wishing to remain afloat. Provisions, oil, and yacht yard at Fareham. In entering leave black posts to starboard ; black-and-white posts to port. Use the lead, and buoy your anchor.

The entrance to Portsmouth should be made either at $2\frac{1}{2}$ hours flood, or just before high water. At other times the tides are strong, attaining a velocity of 4 knots at Springs. Keep a smart look out for H.M. Ships entering or leaving, and for small vessels crossing the harbour. The channel into Portsmouth is so well marked with can buoys to port, and conical to starboard that after once passing the Spit Fort well to port there is no difficulty. Leave both the Outer Spit, light, bell buoy (black-and-white chequered can) and the Spit Refuge, light, bell buoy (black-and-white chequered can) well to port and carry on North by East towards Southsea Castle until you sight the Elbow Spit light buoy (black-and-white chequered can) broad on your port bow. Now alter course a little to the North of NW and carry on between the buoys till you are nearly off the SW corner of Fort Blockhouse, when you should bear away to starboard and trim for the entrance. When you see flying at Fort Blockhouse or at Horse Sand Fort a red oblong flag with a white diagonal bar, keep away : the Royal Yacht or some large H.M. Ship is entering or leaving, and no other vessel must enter.

All repairs, provisions, stores of every kind, including oil fuel, can be obtained not merely at Fareham but at Gosport and Portsmouth.

The anchorage off Southsea is too exposed to be recommended.

Spring tides rise 13 feet, Neaps 10½ feet. For time of high water add 15 minutes to H.W.D.

Bembridge Harbour has become so badly silted up since the War that it is of little use to craft drawing over 4 feet which cannot take the ground. The bar, which lies between St. Helen's Fort and St. Helen's Point, dries almost out. These two prominent marks, together with bearings of Noman's Fort and Spit Fort, are of the greatest assistance in picking up the Drumhead buoy, which signifies the entrance at the bar and is not always easy to sight from a distance, especially if there is any breeze. Beware of getting too far in the direction of St. Helen's Fort among the shoals, or too far west of the Drumhead on to the rocks extending from St. Helen's Point.

In approaching from the West, do not attempt to pass between Noman's Fort and the Isle of Wight shore. The best time for a stranger to reach the Drumhead buoy (black, with a topmark) is 1 hour before H.W.D and there should be about 2 fathoms over the bar at H.W. Neaps. It would be prudent for a yacht drawing 4½ feet not to arrive at the Drumhead buoy until the fourth hour of the flood. By keeping Spit Fort open West of Noman's Fort, and astern, you will sight the Drumhead. Keep it just on the starboard bow, and pass it that side but quite close. If, by any circumstance, you do not readily see this essential buoy at first steer for an imaginary position midway between St. Helen's Point and St. Helen's Fort, and you should have no difficulty. Whilst the rocks immediately West of the Drumhead must be avoided, quite a number of strange yachts get ashore on the hard sand between Drumhead and St. Helen's Fort.

The channel will be seen to have black buoys to starboard, when entering, with white to port. But it is extremely narrow and a course must be kept dead in the centre, except at high water, and be ready to lower sail or ease engines. Avoid the

western corner, opposite Spithead Hotel, giving it a good berth, as you get into the harbour itself. The latter is crowded with small boats on moorings, and the holding ground is most indifferent. A hard SW wind may cause anchors to drag badly. The best proceeding is, on turning to starboard opposite the pier, either let go anchor NE of a white buoy, or else advance a little further up the northern channel and hire moorings from the local yacht yard. The central portion of the harbour dries out. By rowing ashore in the dinghy an inquiry for moorings may sometimes be successful.

All repairs, stores, and provisions can be obtained. There is excellent bathing, and the surrounding scenery is delightful. Owing to the constant silting, cautious use of the lead should be relied upon. Spring tides rise 13 feet, Neaps rise 10 feet. For time of high water add 10 minutes to H.W.D.

In fine settled weather, with the wind off shore (but not otherwise), there is a good anchorage "under Tyne," i.e. South and East of St. Helen's Fort, abreast of a landing, about $1\frac{1}{2}$ cables from the Bembridge shore. But if bad weather threatens clear out and run for Portsmouth, Southampton Water, or Beaulieu.

Ryde is an uncomfortable anchorage and not recommended for small craft.

Wootton Creek would be the ideal harbour for small yachts if only it were dredged. It is situated amid delightful surroundings, and needs only a little care when entering. At high tide there is ample water for small craft, and vessels able to take the ground can remain at Spring tides. A yacht drawing 4 feet should be able to lie almost afloat at Neaps just round the second corner near the yacht yard, whence inquiries may be made for the hire of a mooring. There is definitely sufficient water for lying afloat in the little bight where the car-ferry arrives, but permission must be obtained

and in any case it would be quite essential to haul in well out of the way. With these two exceptions, Wootton Creek, whilst available for remaining afloat from half flood till half ebb, is not suitable for a vessel of 4 feet and over.

The approach is marked by four beacons, of which the first is outside the entrance. Leave this at either side and the other three to starboard when coming in. Since the War this channel has been dredged to 8 feet, but it is very narrow and no liberties must be taken. Auxiliary vessels not having a fair wind should therefore come in under power, keeping close to the beacons. Whether approaching from the East or West, keep well clear of the mud flats. Beware of the Wootton Rocks westward of the entrance channel. At or about high water Wootton Creek can be entered or left without any anxiety. In offshore winds anchor in 7 feet North of Wootton Point or, better still, in Osborne Bay out of the tide and traffic: a delightful position under most circumstances and well situated for continuing a passage East or West. Should a northerly wind render this berth untenable, Beaulieu is not too far distant.

At Wootton can be obtained drinking water and oil, besides repairs. Shops at Wootton Bridge. Springs rise 13 feet, Neaps rise 10 feet. For time of high water add 15 minutes to H.W.D.

Cowes, in spite of its historical and social reputation, is not the best harbour for small yachts. The roads are exposed to strong tides and to northerly winds. It is therefore better to anchor in Beaulieu River. The entrance to Cowes, however, is simple though the channel is not wide, yet well buoyed. Small yachts should not bring up in the roads but on the East side of the fairway at the fringe of the Shraper, where usually a barge or two will be seen at anchor. Be careful, however, not to obstruct the fairway. Unquestionably the best and most comfortable berth in all weathers is

up the Medina above the floating bridge as far as Kingston Quay. There is ample room. In entering Cowes Harbour be alert for set of tide and traffic ; and then for the floating bridge.

Every kind of repairs ; provisions, yacht stores of all sorts, are available.

Spring tides rise $11\frac{1}{2}$ feet, Neaps rise 9 feet. For time of high water remember that there are two high waters : (1) Subtract 40 minutes from H.W.D. ; (2) add 20 minutes to H.W.D. Springs rise 11 feet 7 inches, Neaps rise about 9 feet, but are a little uncertain.

Southampton Water can be approached either from the SE or the SW. At 2 hours before H.W.D. the tide from Stokes Bay goes NW, enabling a yacht bound across the Brambles by the North shore past Lee-on-Solent to carry a fair stream during four hours, thereby reaching Hamble River and Southampton Water at the top of their second high water. But if approaching Southampton Water from the SW, i.e. by the so-called West Channel, the fair tide runs NE from 5 hours after H.W.D. till 1 hour before the same.

It is to be noted that in both Southampton Water and Hamble River the flood tide rises during the first 2 hours and then remains slack for at least an hour, after which it again rises for $3\frac{1}{2}$ hours till first high water. During the next 2 hours it ebbs a little and floods a little, but on the whole is fairly slack and attains its second high water. Having thus spent a total of $8\frac{1}{2}$ hours, there remain only $3\frac{1}{2}$ hours for the ebb which now begins and ends during half the normal period. Naturally this real ebb is of greater strength, having to do its work in $3\frac{1}{2}$ hours instead of the usual $6\frac{1}{4}$. The hottest time of the Southampton ebb is at 2 hours after the second high water.

By paying due regard to the above working of the local double tides, small craft will find great assistance when

cruising inside the Isle of Wight. Whilst it is true that this prolongation of high water has caused Southampton during the present generation to be transformed from a yachting centre to a leading commercial port, yet there are still suitable anchorages. There is considerable liner and other traffic, and small yachts beating to windward must be especially careful to keep clear at such focal points as the SW Brambles and Calshot Spit where mammoth liners have no easy task in making the big turn.

The best sheltered anchorage will be found in Hamble River (see below). Off Southampton Water small craft of less than 5 feet draught can always enter Owers Lake and keep afloat just within the entrance. Ashlett Creek has only 1 foot of water over its bar, but 6 feet inside. Do not go far up, and use the lead. On the other side of Southampton Water there is anchorage off Netley, as convenient, but this is more exposed to the prevailing winds, and to the turmoil of passing steamers. Off Hythe, on the western shore, there is a safe and always interesting anchorage for viewing the unending procession of water-borne traffic. Bring up below Hythe Pier. The holding ground is good, the ferry steamers run from the Pier to Southampton Town Quay about every hour, and there is a yacht yard at Hythe. The disadvantage of this berth is that there is not much peacefulness, though there are beautiful walks ashore.

The two Southampton rivers, Itchen and Test, have both become commercialized, yet up the latter there is still good anchorage for small yachts off Cracknore Hard, which is sheltered from westerly winds, and there is a ferry which runs across to the Royal Pier.

Every kind of stores and repairs procurable at Southampton.

Spring tides rise 13 feet, Neaps rise 11 feet. For time of first high water subtract 20 minutes from H.W.D. For time of second high water add 1 hour 45 minutes to H.W.D.

Hamble River. (See also under Southampton Water.) Since the War this river, once so peaceful and moderately frequented, has attained such popularity that it is now during the summer congested. Otherwise it is the most convenient of all the anchorages in the Southampton district, and the entrance is quite easy. If arriving from the SE, or having crossed over from the Calshot side, the red conical Bald Head buoy will be left to starboard. To the NW thereof will be sighted the Hamble Spit red conical light buoy marking the Hamble River entrance. Leave this buoy well to port, and steer in a northerly direction at first, but presently altering course north-easterly as the channel looks up towards Warsash. Due regard must be paid to the beacons and perches which are placed on the mud at either side, and give them a reasonable berth, but especially towards low water. When beating in or out beware of getting on the muddy Hamble Spit. Carrying on past Warsash, the yachtsman will find piles off Hamble for the purpose of mooring fore and aft. There is a Berthing Master and charges are collected. Further up the river at Bursledon the channel becomes narrower and still crowded, and it is well to hire a mooring if possible.

There are several yacht yards in this river ; all provisions, yacht stores, oil, and water, besides every kind of repairs are procurable. There is a railway station at Bursledon, the opposite shore being known as Swanwick.

By working the slack tides (see under Southampton), yachts can come in and out of Hamble River during an extended period, and there is no bar. Spring tides rise 12 feet 9 inches, Neaps rise 11 feet. For time of first high water subtract 10 minutes from H.W.D. For time of second water add 1 hour 30 minutes to H.W.D.

In beating down the West Channel from Calshot to Beaulieu with a Spring ebb against a hard SW wind there is always a nasty hollow short sea.

Beaulieu River is another resort which has suffered since the War through too much popularity, and the Lord of the Manor now exercises the right to charge dues. In spite of everything, however, this river still remains one of the most charming navigable waterways on the South coast, affording perfect shelter amid exquisite surroundings. The reaches are well marked by perches, and at Buckler's Hard there is a concrete grid where yachts of moderate draught can go alongside for a scrub on application to the Harbour Master. Stores and oil can likewise be obtained at Buckler's Hard, where also there is now an hotel.

Strangers sometimes find the entrance to Beaulieu difficult to locate, but it lies to the West of North from East Lepe buoy (red-and-white vertical-striped can, light), which can always be sighted. Allow for the tide, which runs strongly off here, and stand in towards the shore looking out for the three following marks: (1) Two beacons consisting of white square boards and black stripes (of which the outer has a horizontal and the inner a vertical stripe), erected near to the old Coastguard Station and boathouse on the North side of Beaulieu River, which here takes a right-angle turn to the westward; (2) A lonely pile beacon with top mark, having the appearance of a notice-board, erected at the SE edge of Beaulieu Spit, and to the southward of the two white-and-black beacons.

When once these three marks have been located, only reasonable caution is required. Steer just to the East of North. The lonely pile beacon has to be left well to port at the river mouth, and the two white-and-black beacons kept in line. Thus carry on straight for the northern beach and when almost up to the last-mentioned beacons you will see the long straight westerly reach of the river open. Bear away and keep in mid-channel between the perches.

In approaching the harbour mouth remember there exists a bar, which is subject to change, and not more than $5\frac{1}{2}$ feet

should here be expected at L.W. Springs. And if approaching from the westward about low tide it is advisable to shun the Hampshire shore and edge out nearer the East Lepe buoy until the entrance marks are picked up, for during certain years a vessel drawing only 5 feet may just touch when apparently well to the southward. A good time to enter is at the first high water, for Beaulieu enjoys a double tide.

If using this river only for a night, a good anchorage can be chosen about 1000 yards westward of the old Coastguard Station, where there is plenty of room for getting under way. The Beaulieu Spit covers at high tide, but at low water affords excellent protection. In case of very bad weather, the snuggest shelter can be found by anchoring above Need's Oar Point, and a berth may be found just below Gilbury Hard. But at this stage of the river the moorings become very numerous. It may be found convenient to enter this river under power if the wind is westerly. A yacht beating up under canvas against the ebb should beware of getting on the mud. All perches should be given a good berth, and corners of the river should not be hugged too closely.

After landing from the dinghy at Buckler's Hard pontoon a pleasant walk can be taken to Beaulieu to see the famous Abbey. By landing at Gilbury Hard it is possible to reach the village of Exbury for groceries and postal telegraph office.

Spring tides rise 10 feet. Neaps rise $8\frac{1}{2}$ feet. For time of first high water subtract 35 minutes from H.W.D. For second high water add $1\frac{1}{4}$ hours to H.W.D.

Newtown River affords a safe anchorage for small craft amid delightfully primitive surroundings, but the entrance is slightly difficult for the first visit. Having sighted the Hamstead Ledge buoy (which is a red conical) lying off Hamstead Point, look out for a small black cask buoy less

than a mile to the eastward. This marks the fairway to Newtown River and usually has a staff at its top, with "NEWTOWN" painted just above the waterline. It should be added, however, that sometimes the buoy is missing. The bar, which carries not more than 5 feet at low water Springs, is at the northern side of the buoy.

In entering, leave the buoy to port, and steer SSE at first, using the lead frequently. The latter is essential since on the eastern side there is a big mud bank and on the western side another (though less extensive) shoal. Too much expectation must not be placed on the booms marking this channel, as they are apt to be non-existent or decrepit, but, by sounding with the lead along the eastern side, depths from one to two fathoms should be found even at low water.

The channel then alters in a southerly direction until it is joined on the eastern side by Clamerkin Lake, when it trends to the SW. A good anchorage will be found at this junction in about 3 fathoms, but in bad weather better shelter will be obtained further up the main channel, and there is also a good berth in northerly winds, out of the fairway just within Clamerkin Lake. If drawing over 4 feet, use the lead before choosing this last anchorage. The oyster ponds are relics of an industry that once flourished.

It is inadvisable to pick up any vacant moorings, as these are not likely to be vacant many hours. But whilst avoiding the area marked by the notice board "Anchorage Grounds" (fouled by moorings), one may let go practically anywhere else in the channel that provides enough depth.

Whilst Newtown is safe, it would be better to choose either Yarmouth or Beaulieu if a spell of prolonged bad weather threatens; for SW gales make themselves felt in the river, and supplies ashore are limited chiefly to farm produce, though groceries can be obtained by rowing the dingy to the quay at Shalfleet Lake and then walking along the path to Shalfleet, an attractive village.

Spring tides rise 9 feet. Neaps rise 7 feet 8 inches, but a fresh wind from SW sends in a bigger tide, and a northerly wind retains the tide from ebbing to its normal extremity. There is a double high water, whose times correspond to the hours in Beaulieu River. (See above). Beware of the rifle range at Newtown when red flags are flying at the butts, rendering Clamerkin Lake unsafe. Land at Newtown. Avoid anchoring on the local oyster beds.

Lymington can be entered at all states of the tide, but the Solent stream rushes so swiftly past the river mouth that full allowance must be made, especially when crossing between the Wight and mainland. This applies particularly to sailing craft at Spring tides during light winds.

Look out for the beacon with a top-mark (at the western side of the mouth) and well known by the name "Jack-in-the-Basket." When once this is located and left to port, the entrance is easy, for the channel is well marked by a series of beacons to starboard and port, but give them all a good berth. The channel winds through mud flats, but a craft drawing 6 feet and more can always navigate its shallowest portions up to the town. The drawbacks to Lymington River are twofold. In recent years it has become so congested with private moorings that there is little enough room for a stranger to find a clear berth, whilst the lower part of the river is too exposed in bad weather for any comfort. Secondly, the railway steamers, which run to and from Yarmouth frequently, not merely give anchored yachts a good shaking but are a little awkward to meet when the yacht is turning to windward. Unless there is a good reason for using Lymington, cruising yachtsmen will find Yarmouth much to be preferred.

But Lymington is not without its old-world attractiveness and picturesque appeal. There is a yacht yard here, with every facility for obtaining stores, repairs, oil; and the

steamers do not run on Sundays. The railway station is convenient for the harbour.

There is a double high water, whose times correspond to those in Beaulieu River. Springs rise only 8 feet, and Neaps 6 feet.

Yarmouth (Isle of Wight). There are several reasons why this is for small craft the best harbour in the Isle of Wight, and one of the very best between Newhaven and Poole. It is clean, peaceful, amid picturesque surroundings, handy for getting stores, there are no tiresome restrictions, and it is well situated if bound out on a Channel passage or on returning. There are no trippers, no onlookers, and the berths are very safe. Only in exceptional north-easterly gales can the slightest inconvenience be experienced, but in all other weathers (particularly SW winds) it is eminently secure.

Before the War there was plenty of water, but during hostilities this became a naval port and was used by drifters as well as other craft. The harbour has silted up considerably and the posts no longer mark the limits of mud. Nowadays it is necessary for a stranger to use the utmost care in entering, but especially at low water, or he will certainly get ashore. The local authorities are anxious to attract, rather than repel, yachtsmen and the Harbour Master will be found courteous and obliging. A series of buoys has been laid down to which yachts moor bow and stern, the harbour dues being quite moderate.

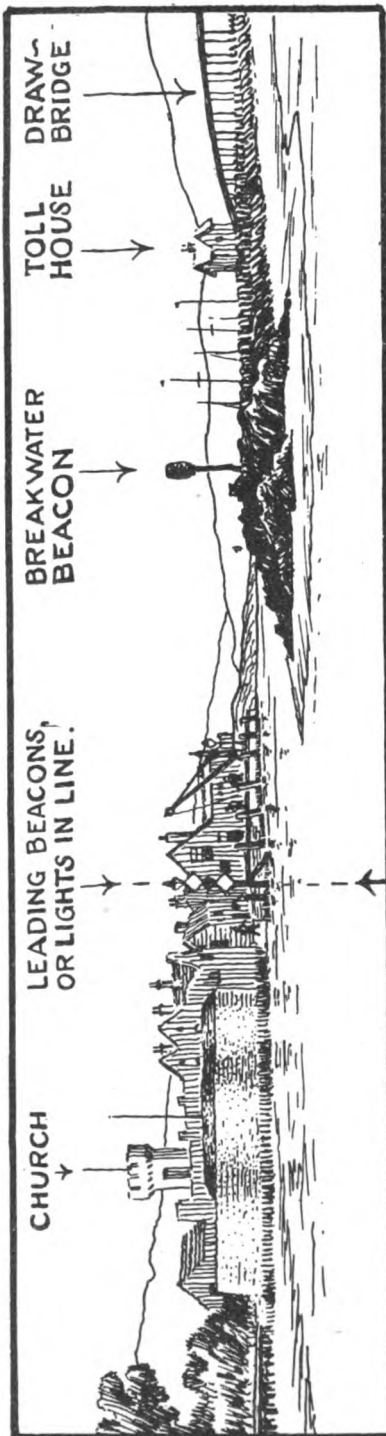
If approaching from the eastward with the strong west-going tide, stand in close to the wooden pier which will be seen at some distance. The paddle steamers from Lymington, Bournemouth, and other ports, call at the end of this pier. Immediately after passing the latter, luff up against the tide in a southerly direction to avoid being swept to the westward. Edge in for a few moments towards the western

flank of this pier, and the tide will soon lose its strength as you near the harbour mouth.

You should now steady the ship on to the leading marks, being careful not to stand too far either to the East or West, since there are shoals from here onwards at either side. Yarmouth approaches at this stage will appear as in the sketch at top of the accompanying Plan. The leading marks will be seen to consist of two white diamonds, the one above the other on posts by the quay to the westward of the castle wall. Keep these diamonds in line, and make sure that the tide has not driven you off that line. A course S by $W\frac{1}{2}W$ will take you right up to these marks.

Be sure to give the black barrel of the breakwater beacon a good wide berth, as here is one of the worst instances of modern silting, and strange yachts frequently get ashore. If such an incident should occur, run a line out to the nearest warping buoy and wait till sufficient tide rises. In entering with a flood tide, beware lest you should be set too far over to the southern side of the harbour when once past the two diamonds. You will find here the motor lifeboat afloat at its moorings, whilst a line of yachts in the summer may occupy most of the berths along the line immediately West of the lifeboat. If one pair of these buoys is vacant, occupy the berth. You can temporarily let go anchor, if necessary, swing to the tide, before running warps off bow and stern. Haul in to the buoys pretty tightly, for at low water (especially in northerly winds) the yacht may just touch the edge of the southern mud. There is little enough room for manœuvring when the tide is out.

If this first reach has all its buoys occupied, a good berth can usually be found at the extreme western end thereof where the harbour begins curving to the southward. It is permitted to go alongside and secure to another craft which may be lying there, but of course care will be taken to put out plenty of fenders and secure to the buoys as well as the

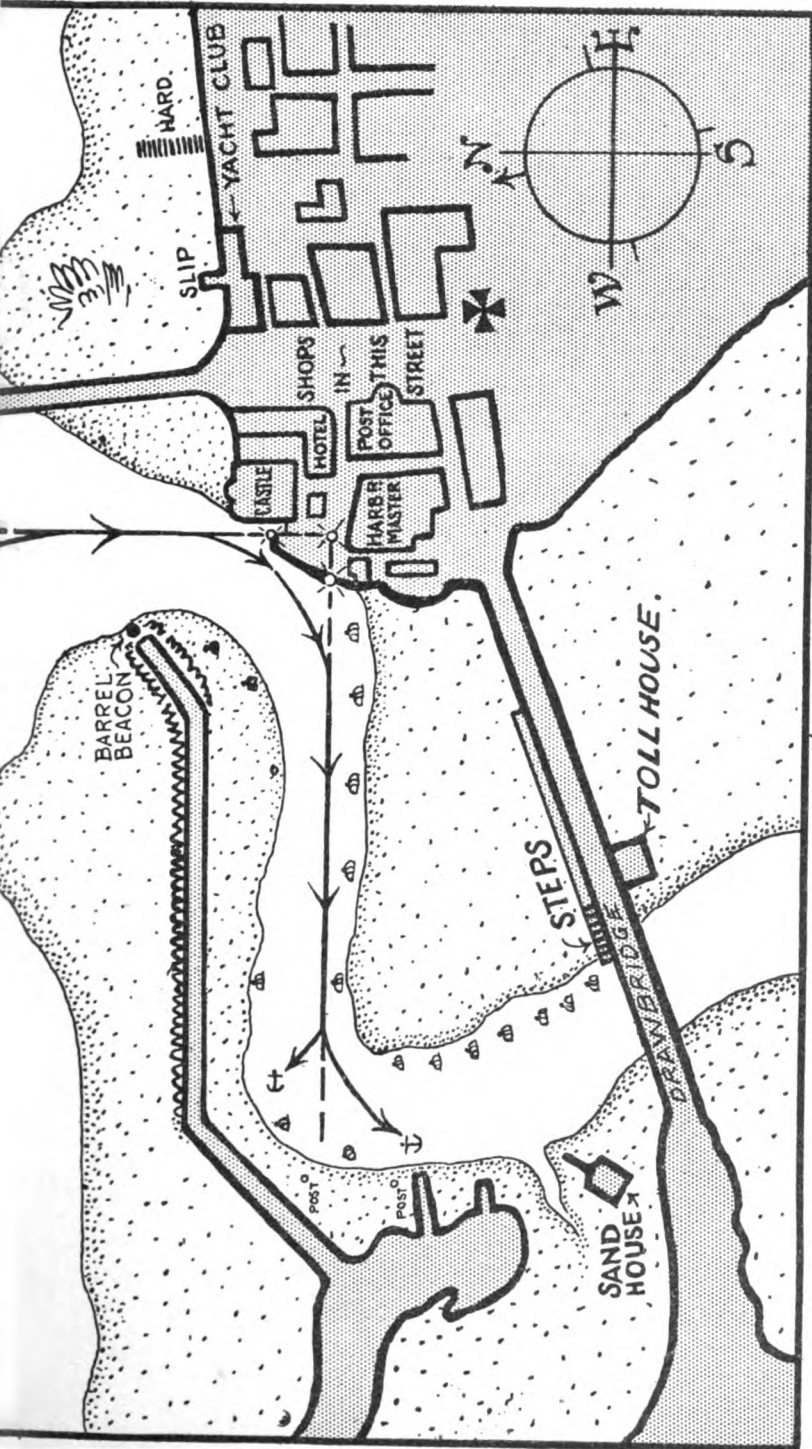


YARMOUTH.

(ISLE of WIGHT.)

LEADING BEACONS
IN LINE





other vessel. If the bows are just SW of where the first anchor is shown in Plan, and the stern allowed to swing in towards the SW, this will be found an excellent berth and suitable for departure even at low tide. Smaller yachts may prefer the spot nearer the bridge as marked by the second anchor, where other buoys and moored craft will be observed.

It will be necessary to ease speed immediately the diamond marks have been passed, and there is precious little room for a yacht beating against the wind. It needs smart seamanship to lower away and pick up a buoy during a good breeze without either drifting ashore or fouling one of the moored vessels. Be careful to keep away from the northern side where the mud projects from the breakwater. Only the shallowest local craft can float on that side, though in olden days there used to be four or five feet at least. It is the line of moored yachts, or buoys, on the southern side which should be kept close aboard as a practical guide, though officially the marks at night for this reach are a light on the south-western corner of the quay in line with the inner leading light. The leading lights into the harbour as seen from seaward are visible for only two miles and are identical in position with the diamonds by day. These lights are both fixed, green.

Landing from the dinghy can be made either at some steps on the North side of the bridge, or at the quay. The latter is more convenient for shopping. Yarmouth is such a compact little town that within a few yards of coming ashore are to be found the church, the local yacht club, hotels, post office, harbour master, yacht chandler's, freshwater tap, garage, and so on. If compelled to leave the yacht in this harbour for a few days unattended, it might be preferable to take her further up the river, for which purpose the bridge can be opened after application at the toll-house. Except for a rare barge, there is virtually no traffic up the Yare.

One of the charms about lying in this harbour is the

fascinating procession of shipping — liners, men-of-war, tramps, Channel Island steamers, yachts, barges, ketches — which comes past the breakwater every hour of the day. By night some lit-up passenger steamer homeward-bound for Southampton from the other end of the globe steams past. There is excellent bathing from the beach westward of Yarmouth Harbour and easily reached by a few minutes' walk. During weekdays communication with the mainland is made by means of the steamers from Lymington, but these do not run on Sundays. Yarmouth station is some distance to the SE of the town, and it is a tedious journey to London on Sunday night via Ryde.

If stopping only the night, and anxious to get away with the early morning tide, some yachts prefer to bring up outside where marked in the Plan by an anchor. Especially is this done when a yacht has no auxiliary power. But there is too much tidal current, and the anchorage is too exposed in times of bad weather for the comfort of any but large craft.

Spring tides rise $7\frac{1}{2}$ feet, Neaps rise $6\frac{1}{4}$ feet. For time of first high water subtract 57 minutes from H.W.D. For time of second high water add 1 hour 5 minutes to H.W.D.

Keyhaven would be an ideal small craft harbour if only there existed a little more room. In recent years a certain exodus from Lymington has increased the number of permanent moorings and restricted the space available both for manœuvring and for anchorage. Otherwise it is a charming, very safe, and delightfully rural harbour with a character of its own. Situated at the back of Hurst Castle, and the westernmost of all the Solent havens, its position is most convenient for a yacht bound West or across to Cherbourg. Keyhaven is not visited by more than a comparatively small percentage of cruising craft; yet it is clean, peaceful, with no steamer nuisance, and an ideal place for leaving a yacht on moorings during the week, in the care of a local fisher-



man. There is a hard at Key Point where you can lay ashore for a scrub. It is slightly inconvenient to reach Keyhaven by train, the nearest station being at Lymington, but an excellent service of motor omnibuses connects with the latter. Motorists, however, will find the distance of 100 miles from London not excessive. Cars can be left at the Inn, and there is a local shop with Post Office as well as telephone. Provisions, oil, and motor mechanic will be found at Milford, which is only a mile away.

There is no need for a pilot, but a certain amount of care should be exercised in entering this little harbour. At first a stranger may find it difficult to discern the mouth. The best time to enter is at half flood, when there is at least a 6-feet depth provided the leading marks be kept in line across the bar. Indeed, even small craft should not come in or out later than half ebb, for the bar at low water Springs has not more than 2 or perhaps 3 feet.

If coming from the westward do not forget to give The Trap shoal off Hurst Point a sufficient berth, and watch the effect of eddies hereabouts on the steering. If coming down the Solent with a hot tide, avoid being set too far West but alter course as soon as the two leading marks begin to come in line. These are erected on the mudflats at the NE side of the entrance, and should bear (when in line) about NW. They comprise one high and one low post with black-and-white striped board, but are liable to be blown down and to be replaced by triangular shapes. During the summer there is usually to be seen a small buoy with flag (used for racing) moored East of Hurst lighthouse. If this buoy is kept in transit with the centre of Fort Victoria (Isle of Wight shore), it will greatly assist you in picking up the two leading marks.

Anchorage in Hurst Roads is not recommended, except temporarily to wait till a sufficient rise of tide; in which case bring up in 2 fathoms off Hurst Old Pier.

Having crossed the bar and almost reached the entrance,

do not turn to port too hurriedly : the Hurst Spit extends further northward than might be expected. But carry on till almost up to the first of the leading marks, when the harbour will be seen open and you can bear away with confidence. The channel is marked on either hand by brooms, which may confuse a stranger at first. Gradually work over to the southern side when well past the Spit, and (if stopping only a night) there is a good anchorage in this first reach with a depth of 2 fathoms.

The harbour next tends in a NW direction, and the local yachts will be seen extending in single line up the channel. It will be advisable to pass quite close to them, especially on a falling tide, as the navigable width is so small. Unless a stranger is sure of being able to occupy some vacant moorings, it would be better not to go above Mount's Lake (which runs west out of this second reach) ; but to anchor in 5 feet just within Mount's Lake entrance, that arm shoaling very quickly. Be sure not to enter the creek preceding this known as the Camber, which runs North and South from the back of Hurst Castle. A warning must be given also against the submarine cable which lies on the harbour bed and is not always in the same position. It is essential to buoy your anchor.

Yachts with auxiliary power will prefer to use the engine, as the combination of numerous moored craft, restricted space, and a $2\frac{1}{2}$ knot ebb tide at Springs, makes matters somewhat awkward for sailing vessels unless the wind is fair.

There is very little difference in the tides : Springs rise 7 feet 6 inches, Neaps only 6 feet. There is a double high water. For the first high water subtract 45 minutes from H.W.D. For second high water, add 1 hour 40 minutes to H.W.D.

Row up in the dinghy beyond the last of the moorings, and land at the steps. Fresh water from the Inn, which is adjacent.

Christchurch Harbour is available only for craft requiring not more than 5 or 6 feet of water at the most. It should not be entered when there is a heavy swell, or during fresh easterly winds or a southerly gale. The ebb tide at Springs in the narrows known as "The Run" attains a rate of 6 knots. The bar is liable to shift considerably, and an onshore gale (especially during the winter) may completely alter the depths of the mouth no less than its configuration. Strangers will find it advisable for the first occasion, if not afterwards, to take a pilot. Otherwise, select fine weather and attempt the entrance at 1 hour before high water. If waiting for a pilot, anchor about half a mile South of a conspicuous cottage on the cliff, surrounded by trees, known as Steamer Lodge. Hoist the signal and wait till a local fisherman comes off. Another temporary anchorage will be found in 2 fathoms with Christchurch Priory in line with the Haven Houses. It would be folly for a stranger, entering without a pilot, not to feel his way cautiously with the lead. Whilst the amount of water on the bar is subject to variation, not more than 1 to 3 feet can be expected at L.W. Springs, and the tide at Springs rises only 5 feet. Therefore 8 feet must be regarded as the maximum depth, leaving little enough to spare for even a shallow draught yacht if there is any scend to the sea.

In coming up "The Run," which leads into Christchurch Harbour, leave the Bass Rock well clear to starboard, pass the quay, and turn to port, and after proceeding a cable's distance to the SSW let go anchor in 6 feet L.W. Springs. There is good holding ground in mud and sand, with excellent shelter from all winds. Fresh water can be obtained from the Haven Houses; provisions, oil, and a motor mechanic from Christchurch, which can be reached in the dinghy.

There is a double high water, the first flood running for $4\frac{1}{2}$ hours. The tide then ebbs for $2\frac{1}{2}$ hours and the water falls $1\frac{1}{2}$ feet. It then floods again for 1 hour, and the water

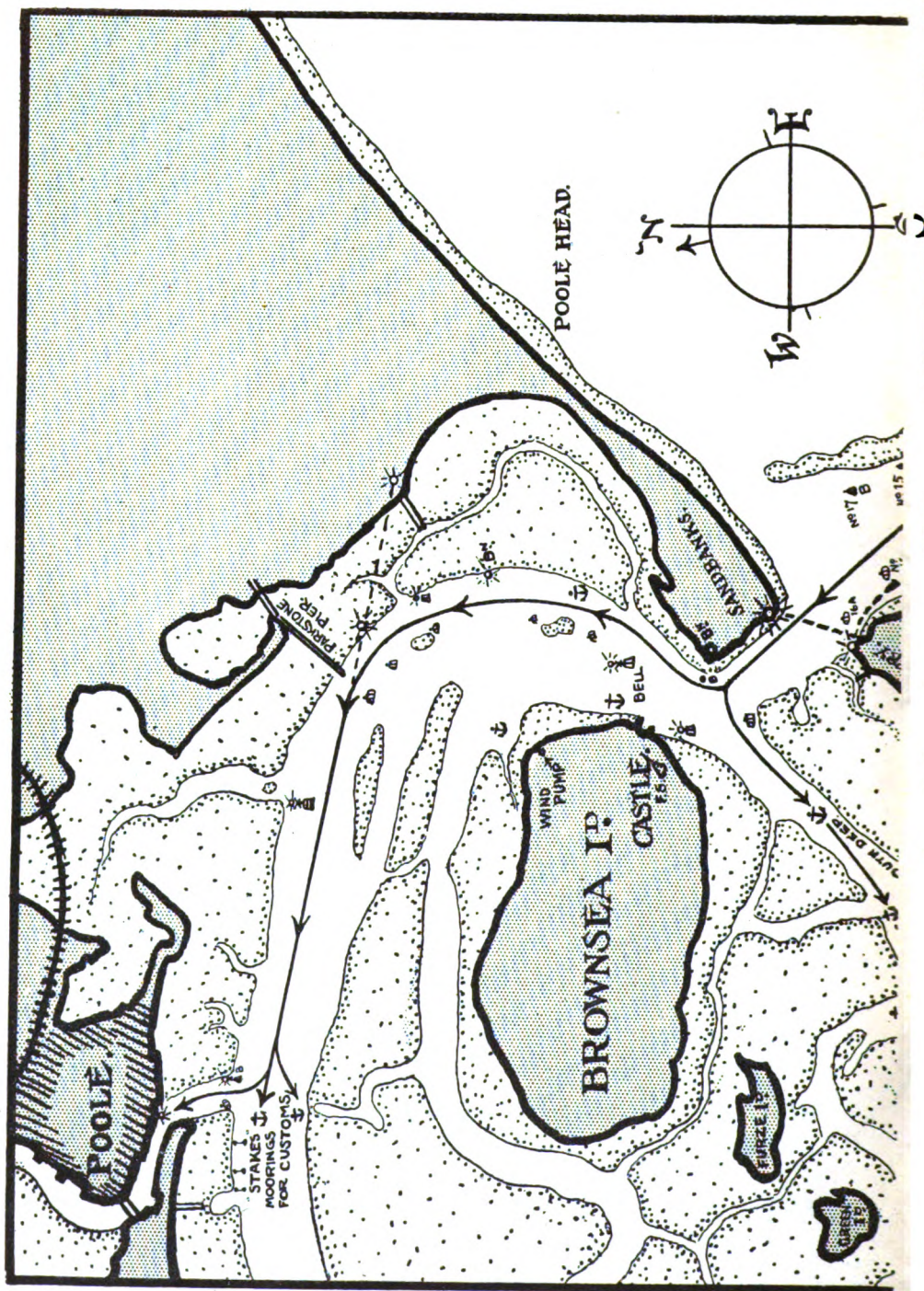
risers again. The ebb next sets in for 4 hours and reaches at Springs the 6 knots velocity already mentioned.

Yachtsmen contemplating a visit to this harbour can obtain the latest information at the beginning of the season by communicating with the Secretary of the Christchurch Sailing Club. If overtaken by bad weather in Christchurch Bay whilst waiting for the tide, clear out and make either for Yarmouth, Isle of Wight, or Poole Harbour.

Poole. In approaching from the eastward, make for Standfast Point which in clear weather will have been visible for some miles. Before making this headland, bear away slightly to the North and you will find the first of the Swash Channel buoys on your starboard hand. A stranger may well be cautioned against coming on a northerly course too soon, or he might find himself on the Hook Sand which is (so to speak) the eastern bank of this channel, the western bank consisting of first the Bar Sand and next a training wall which has been added within recent years. The latter must obviously be avoided.

If the wind is from the SW, and even blowing hard, there will be nothing to worry about, for the Studland shore provides excellent protection. A NW wind is apt to funnel down the Swash Channel with weighty gusts, but it will not raise too much sea even with a flood tide. It is when the wind comes easterly that the trouble begins, for there is a long "fetch" from the Isle of Wight and some nasty waves unite to cause an unpleasant joggle not merely at the Bar itself but throughout Bournemouth Bay, till the angry waters hurl themselves against the base of Standfast Point. Worst of all is the combination of a south-easterly gale when the Spring tide is ebbing. Under such conditions small craft may be endangered, especially towards low water.

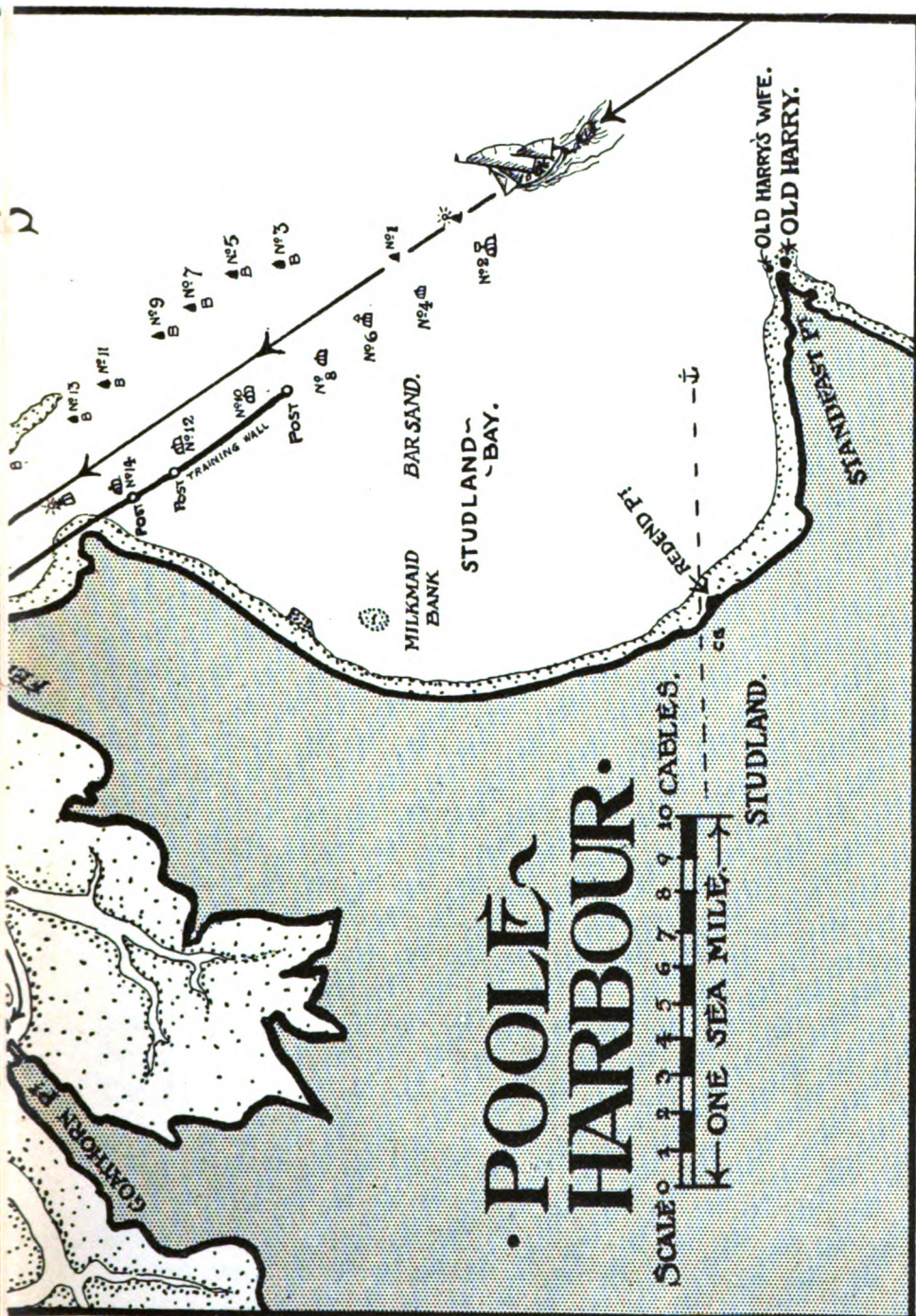
But, ordinarily, the entrance to this enormous natural harbour is one of the pleasantest experiences of the whole



POOLÉ HARBOUR.

SCALE 0 1 2 3 4 5 6 7 8 9 10 CABLES.
 ONE SEA MILE.

STUDLAND.



yachting season ; and, having run up from Portland before a hard sou'wester, there is a wonderful sensation of security and peace. The colouring of the yellow sands, the houses at Sandbanks, the splashes of green, the extraordinary mixture of Italian and Scotch scenery, the tufts of grass and the lofty fir-trees in the distance, make this approach most enticingly attractive.

The depth at the Bar varies somewhat in successive years, but not less than 10 feet may be expected at L.W. Springs. The marking of the Swash Channel is quite simple if it be remembered that those buoys on the eastern side are black, conical, with odd numerals ; whilst those on the western side are barrel-shaped, with red-and-white vertical stripes, and even numerals. No. 2 has a square topmark, and No. 6 a triangular topmark.

On referring to the Plan, the reader will see a yawl making for the entrance. She will pass No. 2 buoy on the port hand, followed by the black conical light buoy which will be left to starboard. The latter is the Bar buoy which has a light flashing every 5 seconds and is not numbered. By keeping at a convenient distance from the barrel buoys all risk of hitting the training wall will be avoided, and you will arrive off the Channel can light buoy which has red-and-white vertical stripes and gives a double red flash every 10 seconds. The north-western extremity of the training wall is between Nos. 16 and 16A buoys. Keep a smart lookout for the Chain Ferry which runs across to Sandbanks from South Haven Point. At night this Ferry, when working, shows the following lights : white-over-green-over-red. The Ferry landing lights are two in number, fixed, red, on each shore.

It is to be borne in mind that according to regulations this Ferry must give way to vessels. Sound four short blasts in quick succession—a fog-horn can be used for this purpose—if you wish the Ferry to keep clear. If the latter should

break down in the fairway, this will be indicated by a red flag during daylight or a white light in the hours of darkness. The old leading lights (North Haven-Sandbanks) have been removed. The tide runs at its strongest where the entrance narrows from the position of the Ferry until Stone Island Point to the NW, and here another red-and-white vertical striped buoy is placed. Give this buoy a good wide berth because of the tide setting on to the point.

If intending to remain only for the night, there is no necessity to go all the way up to Poole itself. Turn into South Deep on the port hand which provides one of the snuggest anchorages on the south coast. If bad weather is impending, a vessel of moderate tonnage can go right up beyond the first anchor shown on the Plan; whilst craft of even 10 tons will find the berth off Goathorn Pier remarkably sheltered. Let go anchor on the western side of the creek and lay out a kedge towards the other shore, so as to lie in the middle. Provided you have plenty of supplies on board, this secluded corner has great fascination if the simple natural beauty of things has any appeal. There are miles and miles of winding waterways to be explored in the sailing dinghy. Green Island and Furze Island, with the large Brownsea Island beyond, and the high ranges of purple hills at the other side, complete a marvellous picture which has few equals. Gales of wind lose their virulence, and the water is smooth. The tidal current is slight.

The biggest pleasure craft, such as steam yachts, usually anchor off Brownsea Castle but to the North and East thereof. This is somewhat exposed for small vessels, and the tide is so strong that the locality cannot be recommended. With fresh wind against the ebb this berth can be most uncomfortable. A better anchorage will be found NE of the conspicuous wind pump, as shown in the Plan, though the lead should be used to avoid bringing up too near the shore. There is protection here in south-westerly winds. Some yachtsmen

choose to anchor right across the other side of the estuary, that is to say, North of North Haven Lake, on the edge of the shoal which is marked by beacons that are periodically changed. The advantage of this spot is its proximity for rowing into the Lake and obtaining supplies : the disadvantage is that even close in towards the mud the tide is pretty strong, and a NW wind makes the place too exposed. The Bournemouth pleasure steamers also disturb in the morning and at the end of the day.

At Poole there are yacht yards, motor mechanics, a sail-maker, and all the facilities of a town. If arriving "from foreign" bring up off Stakes, where the Customs officials will give clearance. This anchorage, however, can be so rough at times that it is impossible for a dinghy to come out. A perfectly safe and convenient berth is to follow the arrow in the Plan, and moor alongside Poole Quay on the port hand (by permission), just short of the swing bridge. But the ebb tide is very strong, and dust is blown on to the decks.

The East Looe entrance to Poole's waterways lies to the East of the Ferry at Sandbanks. Whilst this is convenient for local craft arriving along the shore from Bournemouth, it had better be avoided by strangers. The depth varies in different years, but not less than 4 feet can usually be found at quarter flood.

Beware of the Poole tides, which at Springs are surprisingly powerful. The first flood runs up for 6 hours. The tide then ebbs for $1\frac{1}{4}$ hours, but next floods for another $1\frac{1}{4}$ hours. The true ebb has now only about 3 hours in which to pour out, so that it attains a velocity of over 6 knots at Springs. A slack period of half an hour follows.

Spring tides rise $6\frac{1}{2}$ feet, Neaps rise 4 feet 8 inches. For time of first high water at the entrance subtract $2\frac{1}{4}$ hours from H.W.D. For second high water add $1\frac{1}{4}$ hours to H.W.D.

CHAPTER IV

ST. ALBAN'S HEAD TO DARTMOUTH

St. Alban's Race. In moderate weather, especially with the wind off the land, it is better to keep so close to St. Alban's Head that you only just avoid the rocks. But not even with this precaution can the Race always be avoided. In calm weather there is nothing to be feared except that the disturbed water will be heard roaring, and a long feather-like stretch of white, which looks somewhat worse than it really is. One or two waves may cause a little commotion, but the yacht taking a fair tide will soon pass through these tide-rips. In bad weather, however, St. Alban's Race can be very serious and rival the more notorious Portland Race. A hard SW breeze, for instance, against a west-going tide through the Race kicks up such an alarming sea that in these circumstances any craft under 50 tons should keep two or three miles South of St. Alban's. It is generally stated that there exists always half a mile of smooth water between the headland and the Race ; but even on the finest day such a convenience is most rare, and it is impossible to evade the rough water altogether. Except when giving St. Alban's a berth of two miles at the least, the wise proceeding for a small craft is so to time her arrival at the Race that the tide is just turning in her favour. Batten down, keep plenty of way on, and drive her through the overfalls, steering as close to the rocks as you dare approach. Within a few minutes the worst is over. Although the tidal stream is a little uncertain, it usually turns to run East at about 5 hours after H.W.D., and to run West at H.W.D.

Lulworth Cove, with its chalk white cliffs and translucent waters, in fine settled weather and when the wind is off the land, provides one of the most pleasant and peaceful anchorages for small craft on the South coast. A yacht bound up or down the English Channel, and stopping only a night before rounding Portland Bill or St. Alban's Head, will find during a normal summer, when the wind dies down about sunset, that it is infinitely preferable to stay a tide in Lulworth Cove than either in Weymouth or Portland. Whilst the entrance is not very wide, there is far more space within than at first sight seems likely. The effect of the cliffs is to dwarf this circular cove, but there is plenty of room, and you can enter or leave at any state of the tide.

In looking for the entrance, strangers sometimes find a little difficulty, but it can be recognized by the Coastguard Station and flagstaff perched on the top of the hill at the western side. Proceed boldly in, but keep plenty of way on the ship as there is some tide across the mouth, ledges extend from each horn of this crescent-shaped bight, and the cliffs may blanket a yacht's sails. Keep a lookout in case one of the Weymouth pleasure vessels is leaving Lulworth Cove. It would be inadvisable to put in here as a refuge from a southerly gale, and the riding would be extremely uncomfortable if not risky. But one can land on the beach, walk up the road past the hotel, and obtain provisions besides replenishing with fresh water and motor fuel. This may be no little advantage when proceeding between the Isle of Wight and Torbay.

Since the War there has been moored a red buoy near the entrance, and this should be left well to port when coming in. Having thus passed rather to the East than in the exact centre of the opening, hold on to this NNE course until about halfway towards the northern shore when make for the NW corner to port, and bring up off the beach where you will find good holding ground near a landing place in 2 fathoms

sand and clay. The range of tide at Lulworth is negligible, for Springs rise only about $6\frac{1}{2}$ feet and Neaps 4 feet. For time of high water subtract 4 hours from H.W.D.

Weymouth Harbour, though perfectly easy of access, with about the same rise and fall of tide as Lulworth, and having no stream across the mouth, needs a certain amount of care because of its narrowness and the amount of traffic. During the summer cruising months a visiting yacht must expect to find a number of other yachts just inside; the Channel Islands steamers entering and leaving; Naval picket-boats and drifters running between Weymouth and Portland Harbour; various pleasure steamers and motor-boats. Enter either under power or short canvas, being ready to lower away and run out a warp quickly to one of the buoys; but usually there is a local boatman on the alert waiting to lend assistance. In fine calm weather of a normal June or August, Weymouth Harbour can be very pleasant, with easy work for the dinghy and every facility at hand. But in really bad weather it can be so thoroughly uncomfortable, with craft surging and knocking themselves to pieces, that yachts have been compelled to clear out and run round into Portland Harbour. It is hoped that the new extension to Weymouth's North Pier may improve matters.

If one intends remaining only a tide, and the weather is fine, it is preferable to bring up outside Weymouth harbour, and a landing can always be made on the pier or the sandy beach. In easterly winds, however, this open anchorage is subject to continual roll. A good berth in which to bring up is just North of the North Pier clear of the fairway.

Inside the harbour, on the South side, will be found a series of mooring buoys, the custom being to secure fore and aft, with bows facing the entrance. Do not let go anchor. Small yachts should go to the West end of the trot, then come round East, securing between the buoys and a jetty,

where they will be less liable to receive damage from incoming vessels or be tossed about by the wash from picket-boats. When getting under way there is the nuisance of having to unmoor from bow and stern. There should always be someone left on board to tend ropes when other yachts arrive or depart from the buoys. Dues are charged.

In bad weather, if only permission were obtained, a very snug berth for small yachts could be found right at the top of Weymouth Harbour, in a bight on the port hand immediately before reaching the swing bridge.

The tides at Weymouth have the peculiarity of flooding for 4 hours and ebbing for 4 hours, and remaining at low water for 4 hours, but are of no strength. There is a depth of about 2 fathoms in the harbour. For time of high water subtract 4 hours from H.W.D.

Provisions and all kinds of yacht stores, including oils, and repairs to hull or engines, can be obtained.

N.B. When leaving Weymouth to round Portland Bill, remember that the tide becomes strong in the neighbourhood of Grove Point.

Portland is an immense, dreary, wind-swept harbour more suited to men-of-war than for yachts. Of the three entrances, two only are now practicable, the southernmost having been intentionally blocked by the capsizing of H.M.S. *Hood* at the outbreak of the Great War. In approaching either from the East or West, the peninsula of Portland has the appearance of an island. It is convenient to know that this high projection is over 3 miles long, so that in practice one can always keep 6 miles South of Portland Bill (thus clearing the Race) by a rough estimate of bearing away to the extent of twice the "island's" length. (See below.) Both the North and East entrances to Portland Harbour are perfectly easy and well lit, but at night keep an eye lifting for unlit mooring buoys, Naval rafts, targets, etc. There is

also some risk when trial runs are being made with torpedoes, which in their waywardness have been known to strike and sink a yacht lying in the harbour.

Yachts are treated as merchant ships and must anchor West of an imaginary line made by two white obelisks erected at the South side of the harbour. Let go in the SW corner close to the shore in about 9 feet, two cables North of the small pier, clay bottom. This is quite the best small craft anchorage, but in gales the wind is felt and it is not rare for small vessels to drag. Old Castle Cove, at the North end of the harbour, is under those conditions considerably worse; for the holding ground is fouled by kelp, the SW winds come across Chesil Beach, and yachts soon begin to drag towards danger.

Provisions, motor fuel, and fresh water can be obtained on landing at the SW corner and there is an hotel. There is very little tidal current, the rise and fall, together with the time of high water, corresponding to those at Weymouth.

Rounding Portland Bill. The passage across West Bay should not be attempted by small craft during bad weather; and departure from Portland, or Weymouth, or Lulworth, should be so arranged as to take the first of the West-going tide round Portland Bill. The notorious Portland Race, which has sent many good ships to the bottom and allowed some to get through its dangers only after causing considerable damage, can however be dodged by applying the following simple rules :—

1. If bound West, reach Portland Bill at 1 hour before H.W.D. The tide is then slack, and will begin to run to the westward. Keep right close to the Bill (within 100 yards), where there are several fathoms of water, and you thus pass the land and the alarming white mass of angry turmoil which is the Race. If so circumstanced, this time of tide may be anticipated by half an hour: but it is better to stick to the

above formula, which has stood the test of many passages. Even if there is a head wind, one can still find enough space for making short tacks. If one should ever be so unfortunate as to be carried into the Race, the wisest thing is batten down and let the tide sweep her through as quickly as possible rather than try to keep the ship under control. Even then on a fine day there will be injury to spars if not to hull. Should there be any wind, the only hope would be to lower sail, lash the helm, close all the hatches, and let her drive.

2. If bound East, the surest way is to steer such a course from Torbay or the Start that you will pass not less than 6 miles South of Portland Bill, which ordinarily will clear the fringe of the Race. To this intent the above-mentioned rough calculation of twice the "island's" length affords a valuable guide. Except in thick weather the high land can be sighted at least 20 miles away, so that it is easy enough to get sufficiently seaward in plenty of time.

As an alternative, when bound East, even a sailing craft with a good wind may pass *inside* the Race as in (1), subject to the following : (a) The Bill should be reached at 5 hours after H.W.D. ; (b) steer *not* for the Bill itself, but for at least as far North as the disused high lighthouse. Watch the tide, which will now sweep you round the Bill, whereas had you not kept well to the North and close in, you would have been carried into the Race.

NOTE. When making a passage from the westward (e.g. coming from Torbay) it is not possible for a sailing craft to arrive exactly to time. Hence it is prudent, bound East, to go at least 6 miles South, but carrying (if possible) two or three hours of fair tide. You can then head up for the Shambles lightship, leaving it to port, and thus avoid all dangers. At the extreme pitch of the Bill is a stone beacon 80 feet above high water, and this is a good mark for noting progress through the water, even at 6 miles distance.

It is noticeable, that after rounding the Bill with a westerly

wind and hauling up for Weymouth, the breeze usually comes across Portland Harbour in gusts and squalls, but the sea is kept down by the breakwaters.

If passing Portland Bill at night time, or during thick weather, be on the alert for steamers. There is scarcely any traffic in West Bay North of a line from the Bill to Hope's Nose (Torbay).

Bridport is one of those harbours which should never be used except under special circumstances. Unfortunately at the very times when Bridport might be most convenient for shelter—i.e. when the weather in West Bay becomes bad—it is dangerous to enter about high water, and impossible at low water. There have been serious accidents to vessels which tried to run in before a heavy sea : the opening is so narrow—less than 17 yards wide—that with a southerly gale behind her and the waves breaking astern, it is almost impossible to control the craft from being dashed violently against one of the piers.

Never enter Bridport after dark : the best time is at high water during the day and in fine summer weather under power. The risk must be faced of having to remain here perhaps many days if the weather breaks. For the best water when coming in keep well over to the port side. The mouth dries out at L.W. Springs, and the harbour has from 15 to 11 feet at H.W. Springs or Neaps respectively. But the least water varies according to the sluicing which occurs daily during Spring tides. When a black ball is hoisted on a flagstaff of the East Pier, it is not safe to enter. The best place for mooring is alongside the wall on the starboard hand, just at the turn of that wall but not round it. Nowadays the harbour mostly dries out, but a berth will be assigned by the Harbour Master.

Spring tides rise 12 feet, Neaps 8 feet 6 inches. For time of high water subtract 5 hours from H.W.D.

In an ordinary summer Bridport is a good base for dinghy sailing. A few supplies can be obtained close to the harbour, but otherwise stores are procurable in the town of Bridport which is $1\frac{1}{2}$ miles distant. Rope, oils, and motor repairs are all available.

Lyme Regis offers a certain attraction for small craft anxious to cross West Bay in easy stages. But such vessels must be able to take the ground, for the harbour dries out. There is the nuisance of having to tend ropes, and it should be added that in rough weather, especially when the wind is in the southern quadrant, the sea breaks heavily off the entrance, sending an ugly surge into the harbour. This is particularly bad during SE gales.

During fine summer weather Lyme Regis is a clean, pleasant resting place, but the bottom is hard, and pilotage is quite superfluous. Before the glass begins to fall, clear out and make for either Brixham or the other side of Portland Bill. When entering Lyme Regis give the beacon on the rocks a wide berth, stand right in, the course being $NW\frac{1}{2}W$, with the leading lights in line. By keeping well off the shore and not carrying too much way, there is no special precaution required. Moor alongside the eastern quay, whence fresh water is obtainable. This is a good harbour for a scrub. All provisions and oils can be procured ashore.

Spring tides rise 12 feet, Neaps rise 9 feet. For high water subtract $4\frac{3}{4}$ hours from H.W.D. Lyme Regis is an excellent centre for dinghy sailing.

Exmouth. The harbour formed by the River Exe has the advantage of being clean with ample room, and the entrance being only 35 miles NW by W from Portland Bill makes it convenient for small craft bound East or West. Against this must be remembered that the mouth is a little difficult for a stranger, that the tides at Springs are strong ;

and if a yacht were surprised in West Bay by a southerly gale it would be dangerous to run in, especially when the ebb is making. With winds from West or NE there is, however, some protection, and in fine weather a vessel drawing 6 feet can advance with confidence. It is rare to find more than a very few yachts in the harbour other than local craft. The Torquay pleasure steamer comes alongside the pier daily during the summer.

In approaching from seaward, the channel will be taken between the steep-to cliffs and rocks on the East, and the Pole Sand (which dries at low water) on the West. Pick up the Fairway bell buoy (black-and-white horizontal stripes, surmounted by staff and cross). Thence the channel is clearly marked by black conical buoys to starboard and black-and-white can buoys to port. The conical are given odd numbers, and the can have even numbers. Some extra care is needed in locating these, for the channel twists. Beware when approaching buoys Nos. 7, 8 and 9. Watch the set of tide, and avoid both the shallows to port as well as the Conger Rocks. A stranger should not enter at night ordinarily, but there are two white lights on the Exmouth shore which on being kept in line lead over the bar. The lower light is situated on a terrace at the southern end of the town, the upper being 400 yards to the northward. By day, when coming in from the South or SW, bring Exmouth church to bear NW by North and this will lead to the bell buoy. If approaching from the East, make for Straight Point, give it a berth of $\frac{1}{4}$ mile, and thence sight the bell buoy. If you are overtaken by darkness or heavy southerly weather, it is preferable to avoid Exmouth and run into Brixham.

The tide on the flood and ebb has an average of $2\frac{1}{2}$ knots, but at half ebb, Springs, it is normally 3 knots. At Equinoctial Springs, especially between Exmouth and the NE corner of the Warren, it attains a rate of over 4 knots. It is

the strong tides which make going ashore in the dinghy at Exmouth a matter for serious consideration. The usual anchorage for big craft is in the Pool (SW of the town), near No. 13 buoy. This is exposed to tide and northerly winds. Small yachts will fare much better if they avoid this conventional anchorage, and bring up further West in greater shelter and less tide either off Cockwood or about 2 cables below Starcross railway station. The latter can be further recommended because a steam ferry runs from Starcross to Exmouth Dock, enabling supplies of food and oil to be obtained under almost any condition of weather, whereas if lying in the Pool and short of provisions some inconvenience might be suffered during a spell of hard winds.

Undoubtedly for a yacht possessing a motor the snugest resting-place is within Exmouth Dock. The anchorage off Exmouth Pier is not other than inadvisable. Entrance to Exmouth Dock is approached by the cut, which is very convenient for waiting till the dock gate opens, but beware of the strong tide which rushes past the cut mouth. The best time to enter is at 1 hour before H.W. when you can go straight into the dock. The gate will not be closed till at least high water, but the entrance is only about 30 feet wide. A good berth will usually be found within on the port hand. Let go anchor with plenty of cable, and then run a warp from the stern to the NW quay. This is an excellent place for leaving a yacht if compelled to be absent for a week or two. The dues are reasonable ; repairs of all sorts—hull, engines, sails—can be carried out ; there is a slip ; and drinking water is at hand. The shops and railway station are conveniently situated. It is said, however, that vessels visiting this dock are attacked by worm.

Above Starcross it is possible to reach Topsham canal where vessels drawing less than 12 feet, and less than 30 feet wide, can lie afloat all winter in perfect safety under the lock-keeper's care. This canal continues 5 miles to Exeter,

where there is a large basin entered through a lock. The depth of the basin is 18 feet.

For time of high water at Exmouth subtract 4 hours 30 minutes from H.W.D. Springs rise 11 feet, Neaps $5\frac{1}{2}$ feet.

Teignmouth is another of those harbours which should not be attempted in bad weather, or at low water. During a hard south-easterly blow the seas break badly over the Bar, some 3 cables distance from the shore. Under such conditions a yacht should make either for Brixham or Dartmouth. The shoals at the mouth of the Teign river frequently shift as a result of gales, and the depths are subject to variation. Beware not merely of the Bar (which may have as little as 2 feet at L.W. Springs), but of the Pole Sand (a nasty patch which dries), and the Spratt Sand (which likewise dries). Because of the frequent changes in shape, size, and position, even the most recently issued chart could not define them accurately for long. As they are not marked by buoys, the general locality of the Pole and Spratt must be avoided, and the Bar crossed only at a sufficient rise of tide.

For a stranger arriving off Teignmouth in fine weather with no heavy swell, the wisest proceeding is to watch carefully the course of the local motor pleasure boats which from about April to the end of September will be seen running in and out of the harbour. A friendly hail and the promise of say half a crown will probably be rewarded by the latest information. Otherwise a yacht drawing 4 feet should not attempt entrance until at least half flood, though the best time is during the slack just before high water. If, for example, a yacht has arrived from across West Bay at dawn when there are no boats about, and the tide is at three-quarters flood, there would be no great risk providing the lead is kept going and the following directions scrupulously observed :

At first keep South of the prominent and lofty red headland known as the Ness, which is at the SE side of the river mouth. Stand on a little to the eastward of this bold mark till you see a stone light tower on the Teignmouth shore at the West end of the Den Promenade. Get this to bear about N by W, advance cautiously along this line sounding with the lead, and so continue until you see the river well open on your port hand. Now alter course, lest you should hit either the Pole or Spratt Sand, and you will observe a flagstaff to the westward on the southern shore between the Ness and Shaldon. Steer so as to keep this flagstaff on the port bow, but be careful to keep away from the shallows of the Ness together with a training wall that side. In other words, maintain a course rather to the South of mid-channel, thus avoiding the Spratt which projects treacherously from the northern shore.

When well past the flagstaff, edge over into the centre lest you get too near the Bench which juts out from the South shore. The river now turns to the NE, but do not hug the corner too closely. The black buoys on the port hand will warn you of the extensive hard bank known as the Salty Flat. The best water is abreast of the moorings for yachts and pleasure motor-boats, till well past the yacht building yard and you open up the reach that leads straight to the bridge. When the ebb tide has set in, the stream runs with great velocity and it is well to hire moorings from the yacht yard, or else secure fore and aft to the public buoys in the reach immediately below the bridge. If neither is practicable, secure alongside some coaster which may be lying to the public buoys : or, at the worst, anchor between the latter and the bridge. Do not bring up between Shaldon and the mouth, owing to indifferent holding ground and the tide which is very strong, until the Salty Flat has dried out. A charge is made for use of the public buoys.

All repairs to sails, hull, and engines are obtainable at

Teignmouth. There is a slip way, and every kind of stores can be procured ashore. Above the bridge the Teign can be explored in the dinghy up to Newton Abbot. Motor-buses run to Torquay and Exeter. When lying at moorings near the yacht yard, watch out at change of tide lest in swinging you foul the neighbouring craft. Spring tides rise 13 feet, Neaps 9 feet. For high water subtract 5 hours from H.W.D.

Maidencombe, between Teignmouth and Babbacombe, is a pretty temporary anchorage in fine weather when the wind is off the land. It is sheltered by high red cliffs, which rise sheer from a soft sandy beach. There is good holding ground up to a few feet of the shore, but the rocks off the southern head project further than might be expected.

Babbacombe Bay is sometimes squally, and affords no safe anchorage if the wind has anything of South or East. During westerly breezes, or on a calm summer's evening, it is delightful to remain here. Bring up off the small pier, but on the northern side well clear of motor-boat traffic. It is sometimes possible to hire moorings for the night. There is a restaurant ashore. Land either on the beach or at the pier steps.

Torquay. In making Torbay from the westward, the Devonshire coast will have been kept aboard past Dartmouth; but when approaching after the long run from Weymouth or Portland, the shore of West Bay to the northward will have (except on very clear days) been out of sight for some hours until the high downs of Babbacombe loom up. Under certain conditions of light (e.g. twilight) it is not always easy for a stranger to identify Torbay on arriving from the East; but the double flashing light of Berry Head will soon banish indecision.

At times one may make the whole passage from Portland Bill in a thick fog, yet as soon as one is inside a line drawn from Berry Head to Hope's Nose the thickness suddenly vanishes and all is bright sunshine. It is better under such circumstances to enter Torbay well to the South of the northern shore, as there are several small islands and rocks between Hope's Nose and Daddy Hole signal station.

The worst wind both for Torbay and Torquay Harbour is East or SE, as the seas can roll in from an unlimited distance, and it is surprising how quickly a breeze from either of these two directions can render anchorage in the Bay impossible. It is not a rare occurrence for even destroyers to clear out, but one of the worst easterly blows within the recollection of Devonshire seamen raged in August 1931, when one of H.M. ships had to run from off Brixham all the way eastward till she could get a berth under the heights of Portland. Other craft made for Dartmouth, whilst many spent an anxious time within Torquay Harbour where some damage to yachts ensued.

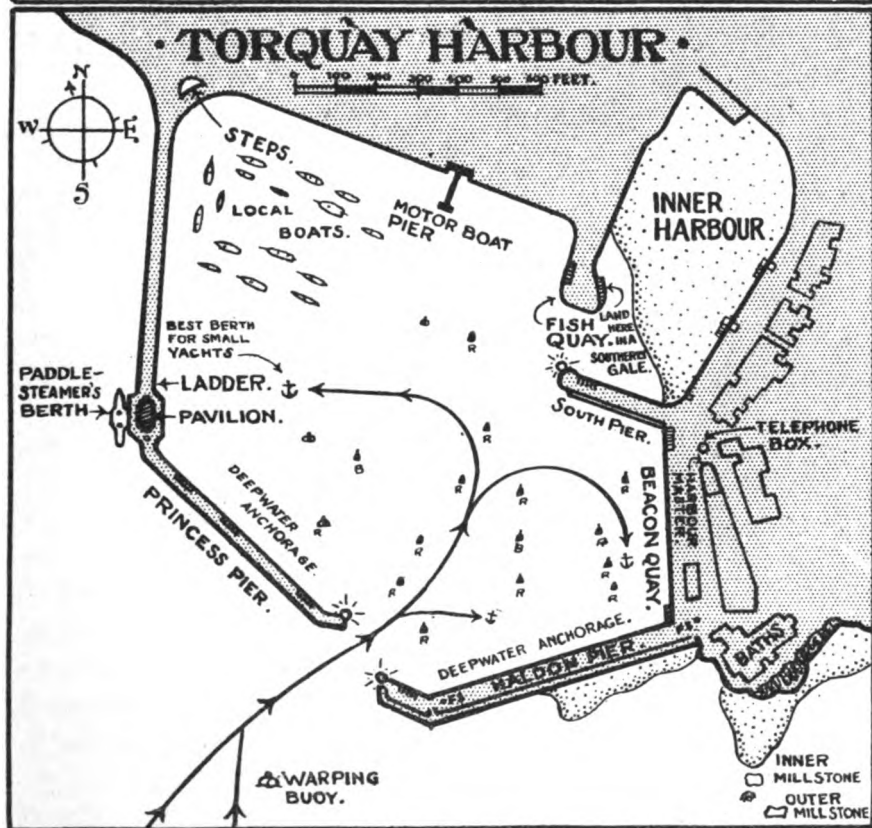
But under normal conditions Torquay is delightful, especially if the wind is from the NW or North, or westerly winds are moderate. When the glass falls and it begins to rain with a SE wind, look out. Before long the wind will veer and pipe up; the seas will come dashing over Haldon Pier, and through the harbour mouth short white-topped waves will rush in. As there is no other exit, they work round the concrete walls and in their rebound set up a lively motion, so that for most of a day it may not be safe to row a dinghy across. But the best place to attempt a landing in such weather is at the NE side of the Fish Quay pier just inside the Inner Harbour. There is then usually too much scend at any of the other steps. As the wind gradually veers till it is blowing from the westward, matters improve; for the Princess Pier gives a fine lee, and the

nearer your berth is to the Pavilion on that pier, the greater will be your shelter.

Before entering Torquay Harbour, get the mouth well open, as nowadays there is considerable traffic of excursion motor-boats which start from the Motor Boat Pier shown in the Plan. Big yachts moor sharp round either to starboard or port as shown in the Plan, where the deepwater anchorages are marked. The tactics are to come in under short sail, let go anchor when just inside the pier, pay out enough chain, round up with the bows outward and parallel with the pier, but then run out stern warps to the nearest mooring buoys. Of the latter there is no lack.

Small yachts are not welcome in the deep water berths in the height of summer, but have several areas from which to select : (a) The best berth is as near to the Princess Pavilion as may be practicable. Usually there are so many private moorings hereabouts that it is not easy to find space, but approximately where the anchor is marked will afford a good chance. Alternatively, bring up between there and the western deep water anchorage, running stern lines out to the nearest western mooring buoy. (b) Some small yachts prefer to bring up in the same manner on the opposite side of the harbour between Beacon Quay and the rear of vessels in the eastern deep water anchorage. By going thus far inwards more shelter from SW winds is obtainable than might be expected. The distance to be rowed ashore is negligible.

The NW corner of Torquay Harbour is so full of moorings for local motor boats (which leave about 9 a.m. and return at sunset) that there is scarcely room here for even the smallest stranger. If there happens to be a vacant space on the western side astern of the deep water anchorage towards the Princess Pavilion, this is moderately satisfactory : but do not get too close to the pier. In exceptional gales the seas pour over the pier and within recent years



one vessel was thus sunk at her moorings. In fine settled weather there are not many harbours of England that can be so pleasant, or provide such enjoyable scenery. Often in the hottest days when ashore the atmosphere is sultry, no inconvenience will be felt afloat. Landing can be made at any of the numerous steps, and plenty of shops are adjacent. Except at dead L.W. Springs, the best place to leave a dinghy is at one of the landings on the eastern side of the Inner Harbour by either of the boatmen's kiosks. Just to the NE of the innermost kiosk is an excellent spot for laying the yacht along the wall and letting her dry out for a scrub at Spring tides. The hour of Spring tides at Torquay is so convenient that you can take your ship in at breakfast time and float off again in the early evening. There is also a slipway at the furthest end of the Inner Harbour. Excursion steamers come along the seaward side of Princess Pier, but at the end of the day frequently enter harbour and berth along the Haldon Pier. From the latter a gun is fired at sunrise and sunset. If arriving by train to join a yacht in the western part of the harbour, there is no necessity to go all the way round the Inner Harbour. Walk on to the Princess Pier and go off from any of the four sets of steps, or a ladder abreast of the Pavilion. Trams run from the station past the pier entrance and to the Inner Harbour.

There is no sailmaker in Torquay, so Brixham is the nearest place for new canvas, where everything can be obtained from ropes to spars and cables. But Torquay does possess a yacht chandler's, a motor mechanic, and there is no difficulty about oil supplies. Fresh water can be got by going alongside the eastern end of the Haldon Pier where it joins Beacon Quay. Inquire of the piermaster who will lower a hose pipe. The Harbour Master's office and a public telephone box are shown on the Plan at the northern end of Beacon Quay. The General Post Office is about ten minutes' walk from the Inner Harbour. Do not rely on

telegrams being delivered to the yacht : it is better to call personally.

Torquay is not the clean harbour it used to be in pre-motor days, and surface oil is apt to spoil one's topsides. Before letting go anchor, see that the latter is buoyed ; there are some sunken moorings. If really bad weather is approaching, more comfort will be found across the Bay in Brixham except in hard northerly winds. Repairs can be effected both at Brixham and Paignton, but the last mentioned harbour dries out.

Spring tides rise $13\frac{1}{2}$ feet. Neaps rise 10 feet. For time of high water subtract 5 hours 7 minutes from H.W.D.

It is worth noting that when moorings are laid down in Torquay Harbour, they are not allowed to be longer than 8 fathoms on each chain.

Paignton Harbour is not universally known. It is restricted and full of small craft which lie to moorings but take the ground at low water. Although the bottom is hard, this is an excellent harbour under normal circumstances for a scrub or for withdrawing the propeller shaft. Go straight in, stop engine at the pier heads, and moor alongside the quay on the port side at the inner end, where also is a slip. Yacht repairs of all kinds, together with the resources of motor engineers and a blacksmith, are available. Cordage, oils, and all provisions can be obtained. Small yachts can be hauled ashore in the cradle for the winter. During easterly winds this harbour is unpleasant. Heavy easterly gales make it scarcely tolerable. Craft drawing 4 feet 3 inches can enter at half tide. In westerly winds it is very snug, and an excellent harbour for dinghies. Outside it is usually possible to find a vacant yacht's mooring if intending to remain only for a short visit. Should the wind come easterly, clear out at once and make for Brixham.

Spring tides rise 13 feet. Neaps 9 feet. To find the time

of high water subtract 5 hours from H.W.D. There is very little stream in the bay, which affords ideal facilities for small boat sailing.

Brixham, once famous as the home of a great sailing fishing fleet, has fallen on less prosperous days since the War. Many of the trawlers have been taken away, but the harbour is gradually being used more and more by yachts. It is easy to enter, there are no currents, and Brixham affords excellent shelter except in northerly winds. Gales from that quarter are rare, and usually in the summer a northerly breeze blows at all fresh only for a short time at the end of a hot day. During gales from the East—the worst direction for Torbay—Brixham is protected by means of its long breakwater, though vessels should go as far inside as convenient under those conditions. There is ample water for the deepest yachts at all states of the tide, and the only precaution to be taken when entering at night is to avoid other craft, as well as unoccupied moorings which are still numerous.

Small yachts especially should go right up the Outer Harbour. If a hard northerly wind makes too much sea for riding in comfort, run just within the Inner Harbour alongside the pier, where a small craft will be waterborne almost (though not quite) at any state of the tide. The best and snuggest anchorage for yachts is as near to the lifeboat slip as may be possible; but there are so many moorings hereabouts that anchors should not be let go before being buoyed. It is worth remembering that the Brixham moorings are laid with 16 fathoms on one anchor and 14 fathoms on the other. If application be made to the Harbour Master, it is usually possible to hire for a week the moorings of some fishing smack having a refit. Otherwise, and in the meantime, a good berth for anchoring is to be found abreast of Messrs. Upham's shipbuilding yard.

The Inner Harbour, which dries out, is a splendid place

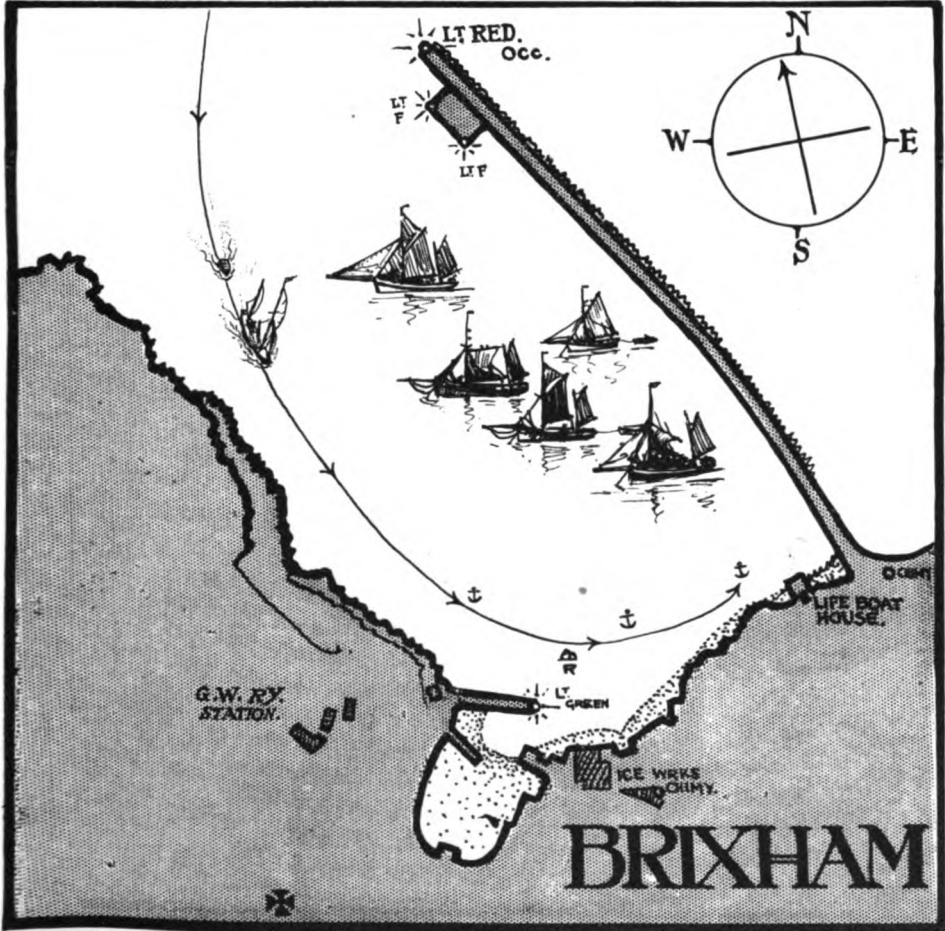
for a scrub or refit. Prices of commodities in Brixham are surprisingly cheaper than at many other ports. Every requisite is obtainable, and this is the best place in the West Country for ropes, sailmakers, petrol, paraffin, lubricants, and yacht chandlery. Motor mechanics, shipwrights, blacksmiths, are all located near to the harbour. Spring tides and Neaps are as at Paignton. For time of high water subtract 5 hours from H.W.D.

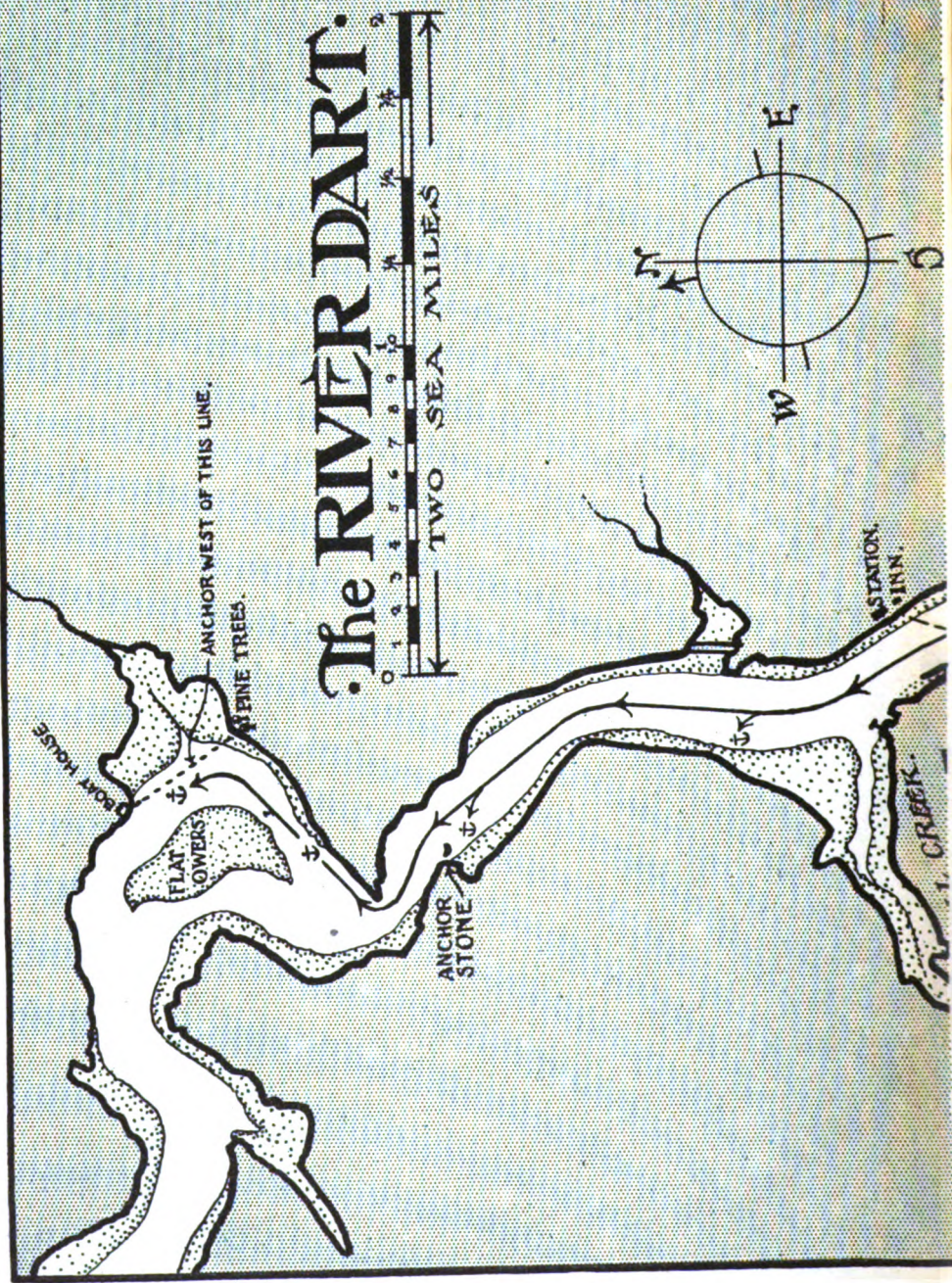
Dartmouth. For anyone who reacts to beautiful scenery of rocks, trees, old castles, and cliff gardens, the entrance to Dartmouth never ceases to be something wonderful. Its past history is so intimately wrapped up in Elizabethan seafaring and western exploration, that every creek is rich with tradition.

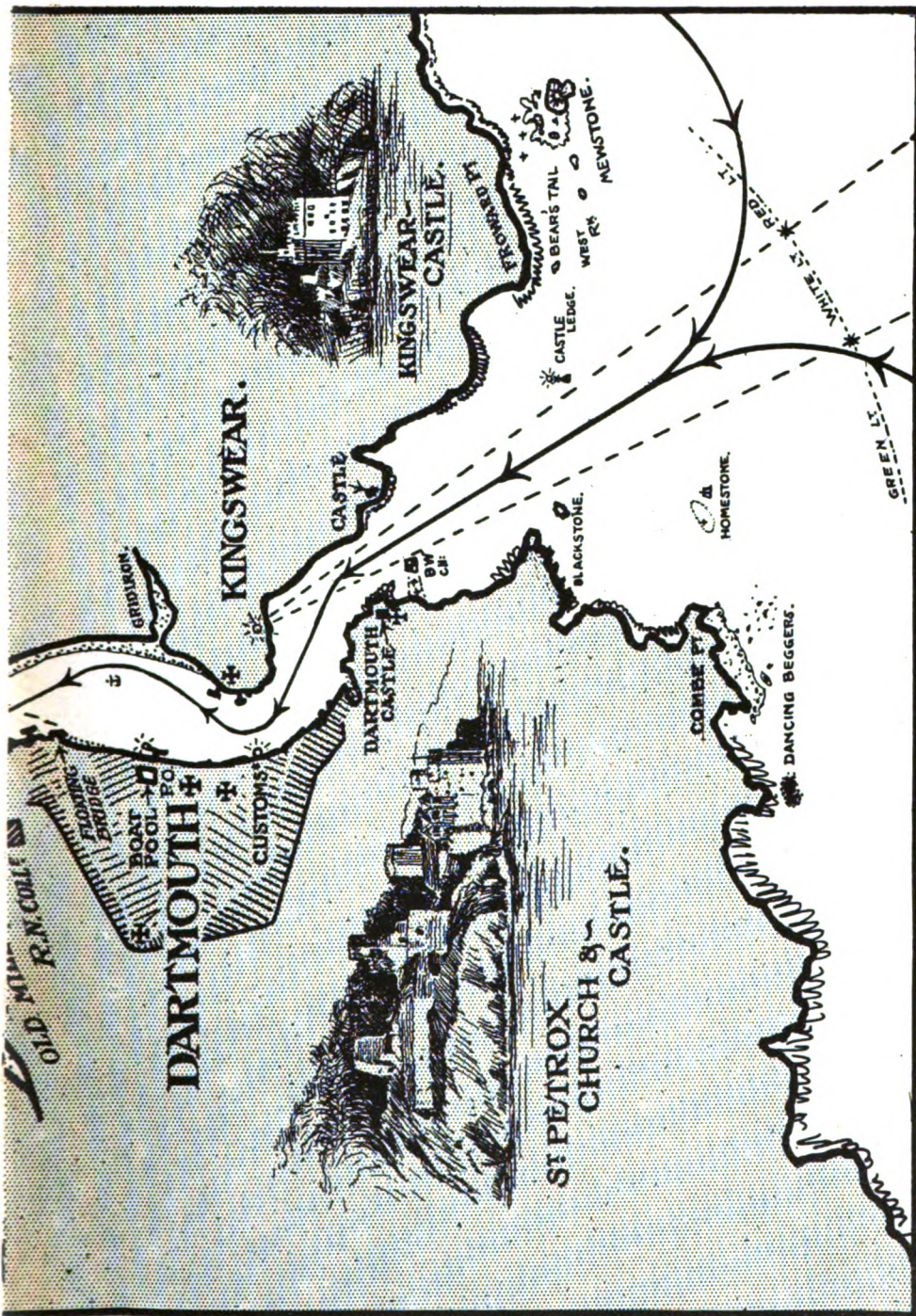
Strangers may find, after coming across West Bay, that the shore outside is so similar for several miles that they cannot identify the half-hidden approach; for the river Dart flows winding out between high hills. But the day-mark on the eastern side, shaped like a wide chimney with a broad base, will be noticed from seaward conspicuous. Give the Mewstone and its rocky satellites a good wide berth when about to enter, and this is especially necessary when turning to windward and the flood tide is making into Dartmouth; otherwise the incautious might be set on to pinnacles NW of Mewstone.

There are only three buoys to notice. The Castle Ledge is a black, conical, light buoy placed on the East side. Even in a lumpy sea this can be readily sighted. As soon as you have identified it, make up the harbour mouth. So long as you keep this light buoy on a starboard bearing, you will avoid all the eastern dangers. On the port hand are two can buoys. Leave the Homestone (black-and-white vertical stripe) at a fair distance, and keep well away from the Checkstone (black-and-white chequer) which will be passed just

ENTRANCE TO INNER HARBOUR.







before reaching St. Petrox Castle. Kingswear Castle (see sketch) on the opposite side is an excellent mark for strangers coming in for the first time. Do not make for the entrance except by keeping westward of this building.

Even at night, and when turning to windward against a northerly breeze, there is really no difficulty in avoiding danger however black everything may seem. The rule is quite simple : On the Kingswear shore, to the north, are two white fixed leading lights. So long as you keep these in line you are in the fairway, and all is well. If, however, you stand too far westward, one of these white lights will turn green. Should you stand too far easterly, it becomes red. Therefore, in beating to windward, always come about on the other tack immediately the light begins to change. The flashes of the Castle Ledge buoy will be an additional guard against carrying on too far in an easterly direction. If anxious to get some sleep and to wait for daylight before proceeding further, a temporary anchorage can be found on the northern shore just above Kingswear Castle ; but not in hard southerly winds. It should be mentioned that sailing craft may find it very slow work trying to get in above Castle Ledge buoy against a Spring ebb and a northerly wind. There is the usual tendency for the breeze to funnel and become parallel with the river. Nowadays most auxiliary craft prefer to enter under power, unless the wind is right aft.

Before making the Kingswear hexagonal light tower, bear away to port and make north-westwards for the opposite shore, whence at night from a wall at the southern end of Dartmouth is exhibited a light. This has three sectors : green, red, green. So long as you keep the light green, you are too far towards the shore. Therefore remain in the red sector till nearly up to the light, and then alter course as requisite towards your anchorage. A word of caution is here needed. Keep well away from the Royal Dart Yacht

Club peninsula since the water shoals thereabouts, but look out for (1) a small power ferry, and (2) the bigger railway ferry, both of which run from Kingswear to Dartmouth. They are "independent," i.e. not using chains or cables.

The tide is not too strong, but avoid being set by the flood on to some big liner which may be moored in the stream. (Until late in the summer there are generally one or two troopships, whose high freeboard may blanket a yacht's sails.) And be careful not to let go anywhere near a steamer's cable. Stand in now well over to the Kingswear shore above an opening and viaduct to starboard. You will see a number of small craft and the space may appear congested. There will be found plenty of room, however, except at Regatta time, but get well inshore out of the tide, letting go anchor where marked on the accompanying Plan. Lay out a kedge towards the Kingswear shore, as a fresh breeze against the tide is apt to make a vessel sheer about a good deal. There are occasions, even during the summer, when a pram dinghy cannot row across to the Dartmouth side. In such cases land by the railway, walk down to Kingswear and take the ferry.

In northerly winds this anchorage is spoiled by the clouds of coal dust which come from the bunker hulks above. The best place to land and leave a dinghy is the boat pool on the Dartmouth side, close to the ferry pontoon. Go inside the camber, do your shopping, and ask one of the local boatmen to keep an eye on your dinghy. There are motor mechanics, yacht builders, sail repairers, and all facilities for supplies. A charming walk in the evening's cool is towards St. Petrox Castle, where there is a beautiful bathing cove.

In bad weather the up-river anchorages are to be preferred. Of these the following can be especially recommended : (1) North of Mill Creek, on the western side, though the stream is fairly strong. (2) About 200 yards SSE of the

Anchor Stone, but kedge in well to the westward out of the traffic. This is a very sheltered spot surrounded by high trees. Just above the Anchor Stone would be a good berth but for the houseboats. Moreover the trees make it rather bereft of sunshine. (3) Off Dittisham is one of the most sylvan anchorages, where all is lovely. Give Greenaway Ferry pier a wide berth and then turn NE. A barrel buoy marks the moorings of a sand-ketch, and there is a private mooring just beyond. Let go where marked in the Plan but lay out a kedge to the NW. Dittisham Pier is only a few minutes' row; the village will yield milk, fruit, bread, water; but you can telephone down to the butcher's at Dartmouth who will send you meat by the next steamer or motor boat to the pier. There is an excellent service of these craft throughout the day. This last-mentioned anchorage is slightly exposed in a SW or NW gale, but it is quite safe and the holding ground good.

Off Galmpton (4) there is room for a few yachts, and the local yacht builders own a convenient mooring. The Flat Owers shoal affords good protection against westerly blows. But a stranger should be careful, in approaching, to keep between this shoal and the eastern shore. The landing at Galmpton when the tide is out presents difficulty. There is a butcher's shop ten minutes away up the village.

No better spot for dinghy-sailing could be found than this locality, if the owner delights in exploring such wonderful reaches as exist between Dittisham and Totnes. Stoke Gabriel, Bow Creek, Duncannon, Sharpham, all live in the memory for months after.

In coming up from Dartmouth, beware of the chain ferry (floating bridge) which runs across the river from near the Royal Naval College to a small Inn.

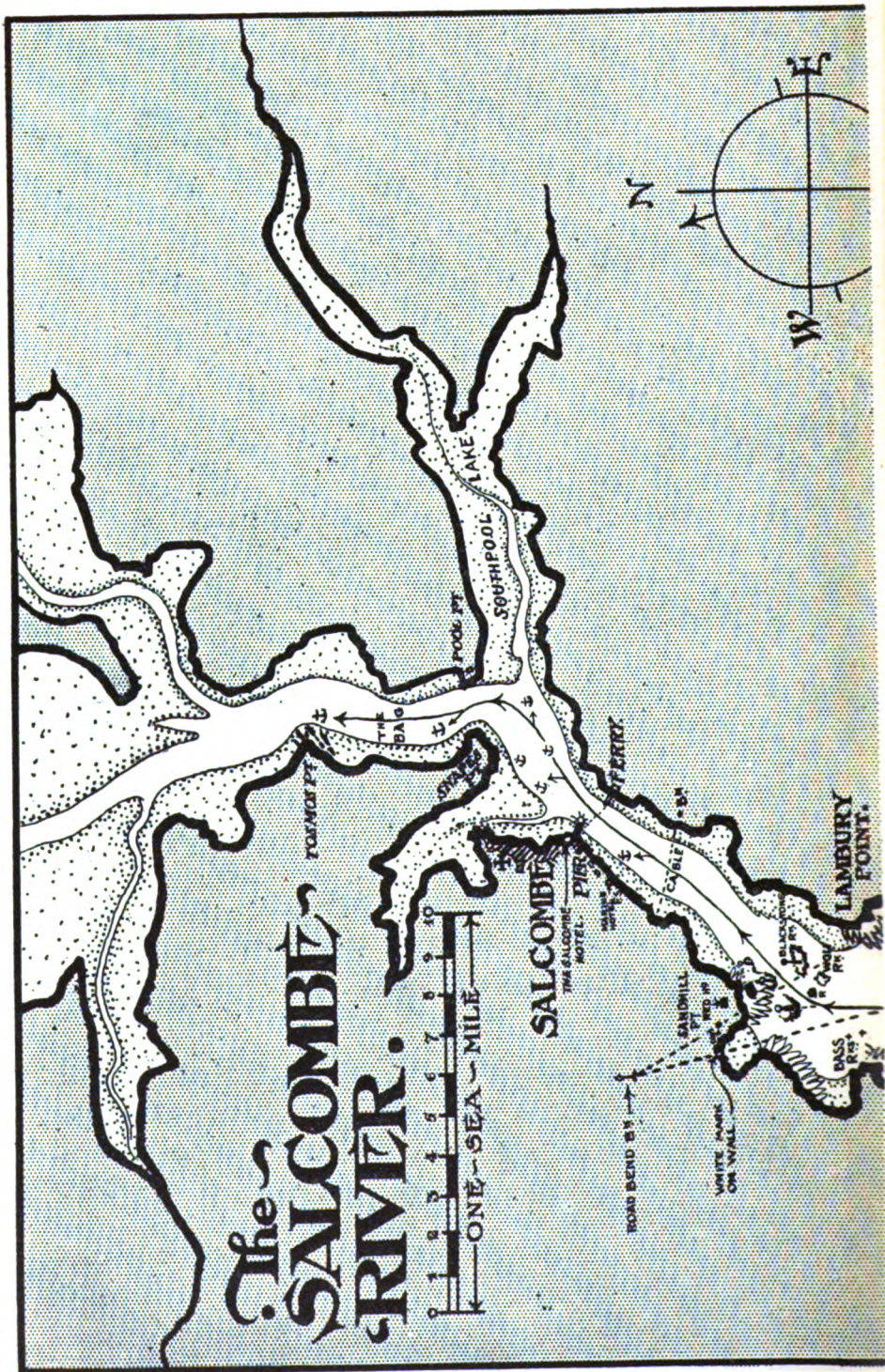
Spring tides rise $14\frac{3}{4}$ feet. Neaps rise $11\frac{1}{4}$ feet. For time of high water subtract 4 hours 41 minutes from H.W.D.

CHAPTER V

SALCOMBE TO THE SCILLY ISLANDS

Salcombe. Under normal conditions, and with the exercise of due care, Salcombe presents no difficulties for entering. Even for a shallow craft it would be dangerous to attempt making this harbour in a SE gale against a Spring ebb, and suicidal under these conditions at low water. In fine weather it is possible for craft drawing 4 feet to get in over the bar at dead low water, provided there is no swell, but vessels of deeper draught should wait till the tide has risen. (The rise at Springs is $15\frac{1}{2}$ feet, and at Neaps $12\frac{1}{2}$ feet.)

From Prawle Point steer $NW\frac{1}{2}W$ across Salcombe Bay (keeping an eye lifting for the cork buoys of lobster pots) till you get the high western shore aboard, before making for the Bar. The position of the latter can readily be ascertained by looking up at these western heights. Where the configuration suddenly changes is the spot abreast of Salcombe Bar. There are two sets of marks for avoiding dangers : (1) At the NW side will be noted a small bay. Focus your glasses on to the wall at the back of this bay, and you will find in the middle a white mark. High above, on the skyline, will be observed also a beacon. Keep these two in line on a bearing $N\frac{1}{2}E$. It should be added that in recent years there has been so much building of new houses, that the crest of the hill is no longer able to give the clear background which it possessed in pre-War days. But in 1932 this useful beacon was restored to its position, and the yachtsman will have no great problem in recognizing it when coming on to the course ; for it still shows up against



the sky line at the bend of a road. In the Plan the easternmost of the two arrowed lines represents the mode of entering on these two marks.

As soon as you have passed a small promontory where the Bass Rocks and Splat Cove (a popular bathing basin of rock) are situated, you will find a small circular red buoy to starboard. Leave this to starboard, and the first western beacon to port. The red buoy marks the Wolf Rock. There has been some talk of blowing it up, but the suggestion has been so far vetoed.

The harbour will next be seen open to the NE, so, bearing away in that direction, leave to starboard a beacon which marks the western end of the Blackstone reef. The first port hand beacon marks the Poundstone Rock, and there are now still two more beacons which also will be left to port. These are the Old Harry and one just past the remains of an old fort. Carry on now in mid-channel.

The other alternative marks for entering are : (2) to cross the Bar on a course N by E½E, that is to say, get the Poundstone beacon in line with the western gable of a large red house which is immediately to the left of the ruined fort. Keep beacon and gable in one till you reach the Wolf Rock buoy, and then proceed as already mentioned. The westernmost of the arrowed line shows the approach by (2), which is quite easy except that under certain conditions of light the Poundstone beacon does not stand out too conspicuously.

Just to the North of Splat Cove is a shallow bay with much weed, and what was once the lifeboat house stands at the shore end. Occasionally a yacht is seen brought up here, but it is a dangerous anchorage if the wind should come from the South or East. Continuing up harbour you will generally find in the summer the biggest visiting yachts brought up abreast of the Marine Hotel, but for small craft this can be a most uncomfortable berth with a fresh south-wester against the ebb, for the tide runs fairly strongly.

Many yachts of all sizes anchor just above the pier off the Salcombe Hotel, especially at the edge of the mud. The advantage here is that of convenience for landing. Others prefer a spot at Ditch End, i.e. a little further to the NE, where Southpool flows into the main stream. This is satisfactory in settled weather, though there is a slight eddy. In fresh SW winds, it is not much better than the previously mentioned anchorages. Recently the local lifeboat has taken up a permanent position afloat at Ditch End.

Unquestionably the snuggest anchorage in all Salcombe is round the corner in the reach known as The Bag. Since the War this has become rather too popular, and the limited space is fairly congested with private moorings as well as houseboats. It is usually possible to hire for a few nights one of the spare moorings : otherwise, let go as near to the western shore as the line of yachts will permit, but beware of getting your anchor foul of other people's mooring chains. If there is no room at the extreme south-western end of The Bag, you may find space just below Tosnos Point. On the opposite shore (though not too far inside) there is a good anchorage with plenty of space in a fairly well protected bay, where one or two vessels usually lie. The advantage of this side is that there is no difficulty in clearing out. When the weather gets unbearable lower down the harbour, even the bigger yachts run into The Bag and let go in mid-stream.

It should be added that in exceptional summer gales, when the wind is southerly, The Bag can be quite uncomfortable, and there have been instances of houseboats breaking from their moorings ; but whenever the wind veers to SW, West, and NW, there is excellent shelter. Northerly winds never cause much trouble, and from the worst easterly gales nothing need be feared. The holding ground is quite good until it blows a gale, but there is so much kelp on the rocky bottom that yachts frequently drag during the fiercest trials.

Another disadvantage is the long row for the dinghy from The Bag to the town; the passage may be both wet and strenuous between Snapes Point (which should always be given a wide berth by yachts, though not by dinghies) and Salcombe. In any normal summer Salcombe is a paradise for small boat sailing, and a picturesque haven of rest. The walks along the cliffs are superlatively beautiful, whether eastward to Prawle Point or westward round Bolt Head. The bathing at South Sands is ideal.

Ashore the usual provisions can be obtained. There are several boat-builders, a motor mechanic, and oil supplies. The landing facilities are not of the best, but the pier can be used, as well as the quays at high water. At Springs it is better not to land or leave the shore in the neighbourhood of low water.

Anchorage dues are now charged in Salcombe, but they are quite moderate.

There is no railway station nearer than Kingsbridge at the top of the estuary, but there is a service of motor-'buses.

For time of high water subtract $5\frac{1}{4}$ hours from H.W.D.

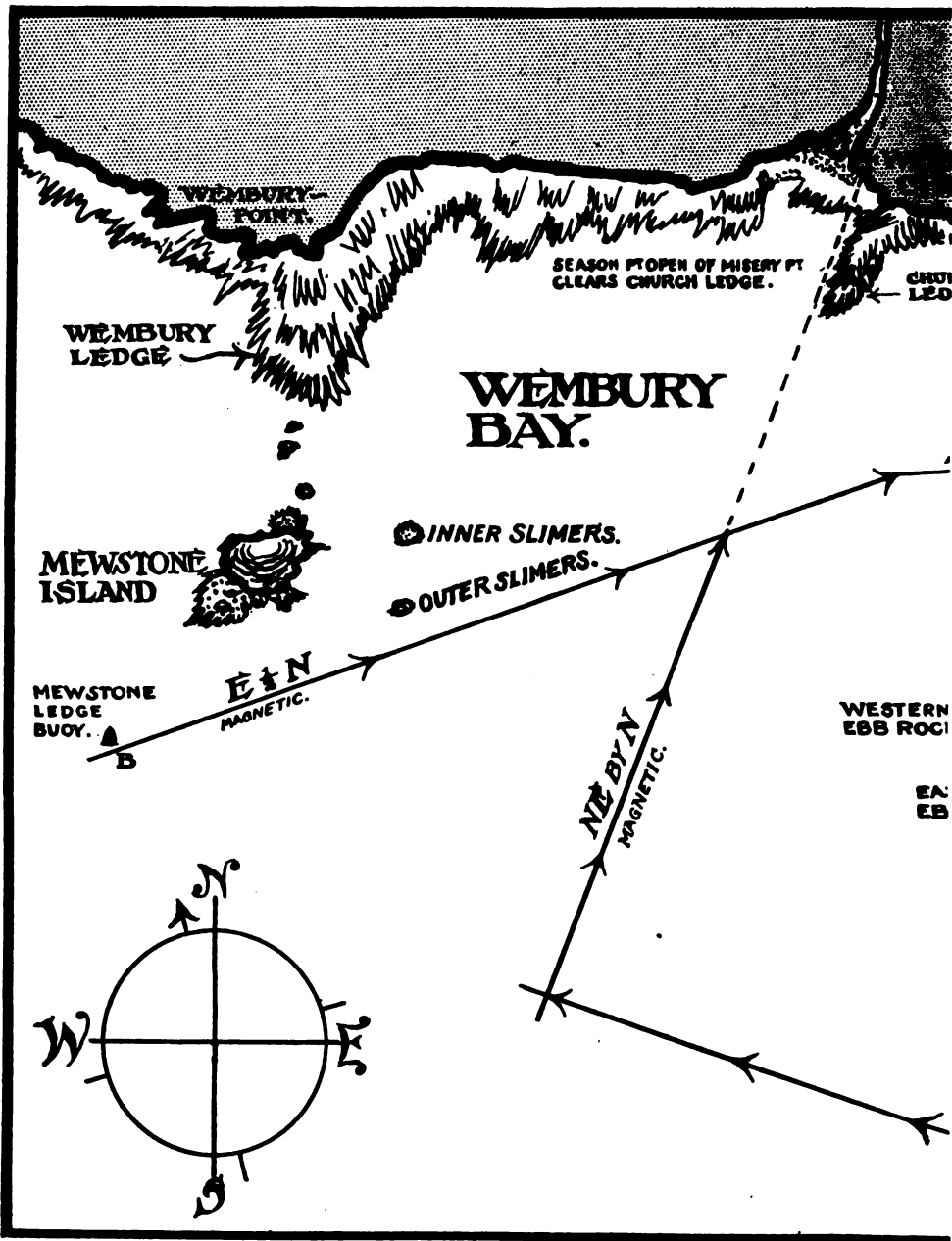
The River Yealm. It is always a little surprising that so many yachtsmen, professional no less than amateur, avoid using this exceedingly beautiful harbour. At first the entrance may seem not too simple, but only due caution is required. The great convenience of the Yealm is that if proceeding between Salcombe and Fowey when the weather becomes bad, one can run into shelter. It is much nearer the sea routes than the long divergence into Plymouth, and infinitely cleaner. The contrast of coming into the sylvan River Yealm after being buffeted about by the English Channel, only just outside, is something to be enjoyed. Often, when the latter is in a state of turbulence, one quickly arrives in waters as smooth as a lake.

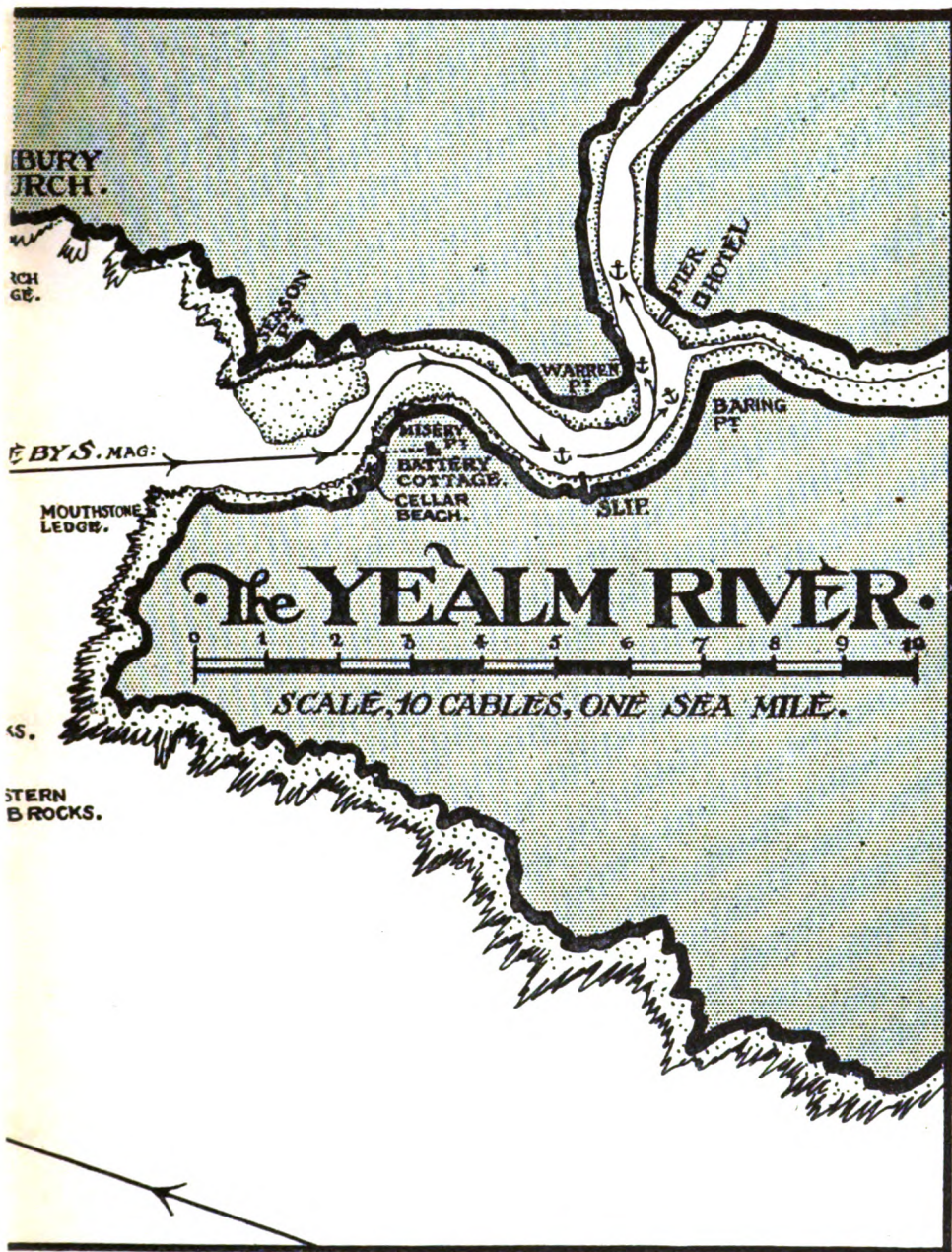
When approaching from Salcombe on a north-westerly

course, beware of the numerous cork buoys of the lobster pots between Bolt Head and Bolt Tail, as well as on your track in Bigbury Bay. These are nasty things to get round your propeller. Gradually the high downs of Yealm Head will be seen in the distance and, on a clear day, Rame Head beyond. If coming from the westward, steer across the mouth of Plymouth Sound to pick up first the Mewstone Island. This is not always easy to recognize, in spite of its height, as it melts into the background ; but presently the island gains distinctness, and a little to the SW of it you will notice a black conical buoy, called the Mewstone Ledge.

To the North of this buoy are rocks and foul ground. Lay a course easterly from the buoy to bring you just clear of the rocky Mouthstone Ledge at the northern side of Yealm Head, and keep an eye lifting to make sure you give that ledge an adequate berth. You will now see bearing about E by S a house with a golden weather-vane at the apex of the hill to the North of some new white coastguard cottages. Steer for the first-mentioned house, keeping the southern shore fairly close aboard, whilst avoiding the northern side, whence a shallow bar stretches southward for most of the width.

The aim now should be to follow the curving of the river, still keeping the southern shore aboard. Immediately below the golden weather-vane house (known as Battery Cottage) is a popular bathing beach, at which point you will gradually alter course north-eastward, whilst still remembering the Bar. The channel now begins to be very narrow until you have rounded the next corner—Misery Point—which must be given a good wide berth. You thus stand on in a north-easterly direction almost up to the northern shore. Next, by taking a gradual sweep, you come back to mid-channel and find yourself heading SE. Carry on thus so as to leave some houseboats close to starboard, and from this stage give the northern shore a very wide berth, especially off





Warren Point at high water. The shoal here projects much further than suspected. By keeping well to the southward at this bend all danger is averted. Leave buoy here to port.

You are now in one of the most secluded and lovely spots to be found in southern England, with trees growing to the mark of high water. There are four anchorages from which to select: (1) Either just immediately seaward of the westernmost houseboat (if stopping only a night), or to the southward of Warren Point in the bight abreast of a slipway and cottage. It is somewhat crowded with moorings off the latter. But (2) a little to the NE, and on the eastern shore, will normally be found a good berth with plenty of room, though it is better to buoy your anchor if anywhere near a houseboat. The best berth (3) is well round Warren Point, that is to say, just past some cottages, opposite the opening of the Newton Ferrers arm of the river. Bring up with your main anchor to the westward, close under the cliff, and your kedge towards the Newton Ferrers arm. Provided no other craft has forestalled you, this anchorage should certainly be occupied: even in the worst south-westerly gales this spot has excellent shelter if you get in sufficiently far. Another good berth (4) is to the North, beyond the last houseboat, opposite Madge Point, quite close to the north-western beach at the corner where the river again turns to run in a north-easterly direction.

Strangers should be reminded that in approaching (4) they must avoid the eastern and hug the western shore, as from the former there extends a muddy shoal. By keeping close to moored craft there will be found enough water. Because of the oyster beds, anchorage above (4) is prohibited. Landing can be made at the hotel pier, or at the slipway below (2), or as convenient on the beach. There is also a landing at Warren Point, though it is not a good place for leaving a dinghy unattended.

In normal summer weather the Yealm anchorages are

delightfully comfortable, yet in heavy south-westerly gales, notwithstanding the high hills and land-locked area, a certain amount of inconvenience may be experienced, though not of danger. Against a Spring ebb a hard SW wind can make (1) somewhat lively. Berth (3) is quite all right, and (4) is satisfactory as soon as ever the wind veers from South. Up this reach the breeze has a curious way of rebounding from the hills. Berth (2) is not so good as (3), since a hard SW wind rushes round the corner with force. There is so much kelp on the river bottom that the anchor may drag. During exceptional gales one or more of the houseboats have been known to drag likewise. The tide is moderately strong, and a yacht with auxiliary engines should enter or leave under power.

Hot baths can be had at the hotel. Meat, groceries, bread, paraffin, can all be obtained both at Newton Ferrers and Noss Mayo. At each of these villages there is a post and telegraph office. If it is low tide, you must walk; but, otherwise, it is a pleasant row in the dinghy. There is a motor mechanic at Newton Ferrers. An exceptionally attractive coastal walk will be found after landing at the slipway SW of Warren Point, and then following the path beyond Battery Cottage round Yealm Head.

When entering the Yealm from eastward, or bound out up Channel, a convenient mark is to keep Wembury Church bearing NE by North. This will keep you well clear of the Ebb Rocks. Often after a south-westerly blow, more swell may be found between Mewstone and Mouthstone Ledge than exists a mile South of Yealm Head. If anxious to ascertain the state of things outside, one may land at Warren Point and after five minutes' walk a good idea of the conditions seaward can be obtained. There is also a somewhat dilapidated weather-vane on the top of Warren Point which may indicate the wind's direction.

Beware of the local excursion motor ship from Plymouth

which runs in and out several times a day. She anchors between berth (2), mentioned above, and the hotel. The worst spot at which to meet her is at the narrows by Misery Point. There is no longer a motor boat running up to Steer Point. Plymouth can be reached from Noss Mayo by motor-'bus.

Spring tides rise 16 feet. Neaps rise $11\frac{1}{2}$ feet. For time of high water subtract 5 hours 20 minutes from H.W.D.

Plymouth. Whilst it is possible to enter either side of the Breakwater into Plymouth Sound at any state of the tide, and all dangers are well marked, yet the anchorages in the Plymouth area cannot compare with others along the coast more suited for small craft. The Yealm River should ordinarily be chosen rather than the Cattewater both for comfort in a blow, and generally as regards environment.

Cawsand Bay is delightful in fine, settled weather, and a good anchorage is just inside Pier Cove. Ever since the sixteenth century, and earlier, vessels have been wont to bring up here so long as the wind is westerly, for there is a good sandy bottom close in to the beach. But the danger is that with a shift of wind to the East this is a lee shore, and a nasty sea springs up. More than one small yacht has thus succumbed within recent years.

Under Drake's Island on the North side (but well clear of the telegraph cables which connect with Mount Batten) there is a recognized anchorage with only slight tide as well as a sandy beach for bathing, and normally it is fairly quiet. During a SW summer's gale there is a certain amount of swell which runs round, and in a period of unsettled weather this berth is not sufficiently sheltered for small yachts. Bigger yachts may secure to certain Admiralty mooring buoys close to Drake's Island, provided permission is sought from the King's Harbour Master at the Longroom at the top

of the hill West of Millbay Docks ; and dinghies would be permitted to be left in the camber.

Off the Hoe Pier there is too much exposure from all southerly winds, too much noise from the shore, too much turmoil from the passenger craft, and such indifferent holding ground that the berth cannot be recommended.

Barn Pool under Mount Edgcumbe is safe, well sheltered and out of the strong tide. Go well in towards the beach, using the lead, and let go in 14 feet. Whilst this is a quiet spot, it is satisfactory only so long as there is no need for landing on the Plymouth shore ; a 2-knot tide between Wilderness and Devil's Points having to be negotiated.

The Cattewater is too commercialized, and its waters often so dirty, for much pleasure to be derived. Although it provides some protection from easterly and even south-easterly winds, the Batten Breakwater does not prevent an unpleasant swell from running in during hard southerly, south-westerly, and westerly winds. Small craft could find more adequate shelter by choosing a berth past Turnchapel Point and off Oreston in 9 feet. But keep well away from the shoal water. This is a somewhat dismal corner of Plymouth. Millbay Docks, where there is plenty of water up to 24 feet, are preferred by some yachtsmen. The entrance is easy, but the berthing is a little exposed and the environment not too clean. Yachts moor head and stern in the Outer Basin with the permission of the Dockmaster. Dock dues are charged.

At Plymouth Breakwater Spring tides rise $15\frac{1}{2}$ feet. Neaps rise 12 feet. For time of high water subtract $5\frac{1}{2}$ hours from H.W.D.

Looe is nominally the first harbour West of Plymouth Sound, and is the port of a fishing fleet, but the harbour dries out entirely and is useless to yachts which cannot take the ground. On the other hand the bottom is fairly level, and there are plenty of quays against which a craft can lean.

Many good yachts and fishing craft have been built at Looe, which is the home of a fine race of rugged sailormen. There is most water alongside the eastern quay, which dries about 5 feet, but has at least 10 feet at H.W. Springs. A yacht could choose a vacant berth at this side. If waiting for the tide to enter, anchor temporarily in the roadstead, which is sheltered from westerly winds, but exposed to winds from E to SSW through South. If unable to obtain sufficient rise of tide when the weather breaks onshore, it is advisable to run either into Fowey or Plymouth Sound. Otherwise a suitable anchorage will be found North of two white marks-in-line (which are on the western shore South of the entrance), with East Looe church bearing about NW. Here you will get a sandy bottom in 5 fathoms.

The entrance is easy, but avoid the Rennie Rocks and the Longstone. Do not try to pass between Looe Island and the shore. The eastern pier projects about 55 yards southeasterly, and has a light on a red iron column at the head. By keeping within its white sector the dangers are avoided. Storm signals are shown from the eastern pier. Spring tides rise 16 feet 9 inches. Neaps rise 13 feet 6 inches. For high water subtract 5 hours 30 minutes from H.W.D.

Most stores, including oil fuel, can be obtained. Motor mechanic and shipwright. Fresh water from the quay.

Fowey is actually the first reliable harbour for vessels bound West from Plymouth Sound. Polperro, though quaint and picturesque, is very small, dries out, and is not to be attempted in the worst weather, for the local practice under such conditions is to close the entrance with baulks of timber. Fowey can easily be made from the eastward except in thick weather; the red-and-white striped daymark on Gribben Head, erected by the Trinity House in 1832, being a useful aid of identification. Strangers approaching Fowey from the eastward should give the coast a berth of a mile and not

mistake Lantivet Bay for the Fowey entrance. The loss of the 31-ton cutter yacht *Islander*, with all hands, on the evening of August 20, 1930, in Lantivet Bay during an exceptional summer gale will be remembered. Beware of the lobster pots, whose corks may foul a yacht's propeller between here and Rame Head. The Udder Rock, lying between Fowey and Polperro close to Lantivet Bay, uncovers only at L.W. Springs, but is marked by a black-and-white striped bell buoy on the southern side. At night, or in thick weather, this will of course be given a wide berth.

The top of Gribben Head from the water is 334 feet, but the light tower is on St. Catherine's Point and is painted red. It is only 91 feet above the sea, and actually just within the entrance.

On approaching the harbour mouth, give the starboard shore a good berth off Punch's Cross until you see the tower of Fowey church and Whitehouse Point in line bearing NE, when you can carry on up harbour in mid-channel. (Whitehouse Point has a light and a jetty.) Small yachts up to about 15 tons, if making only a short stay in fine weather, or with the wind *not* in the SW, will find the best anchorage to the SW of Penleath Point abreast of the Royal Fowey Yacht Club. A good deal of dredging has taken place in recent years, so that by using the lead it should be possible for a light draught vessel to get fairly well in towards the eastern side. The further in, the better the shelter, for SW and S winds send in a swell if it is blowing hard outside, making matters uncomfortable on the ebb. But beware of getting so far to the eastward as to be ashore at low water. It is wise to let go the main anchor to the SW and run out a kedge to the ENE. Another anchorage, and a little more sheltered, is off Polruan, that is round to starboard immediately after passing Castle Point. Here there is not too much room in the summer among other craft, and the lead should be used to avoid getting too close to Polruan quay. Big

yachts bring up in the stream, but leaving a fairway on the western side for the considerable amount of traffic which now goes on in connection with the china clay industry. In really bad southerly weather, smaller yachts should run further up river and moor either off Mixtow or above Wiseman Stone, but avoid the rocks in rounding the latter. In case the Wiseman anchorage is under the influence of a northerly gale, or other temporary conditions make it unsuitable, the berth off Mixtow quay is well protected from all winds, though south-westerners deposit a certain amount of white clay dust. Run a kedge out, but do not get too close in toward the mud on the NE shore. On the flood tide there is a delightful expanse of water for sailing dinghies right up the river to Lerryn at one arm, and to Lostwithiel on the other.

In proceeding from abreast of Fowey to Wiseman Stone there is nothing to pick you up provided you keep in mid-channel. The Carn Rock, though marked by a red conical buoy, should be left to port when going up river. Be alert for steamers coming out from the china clay wharves, or swinging.

If the Royal Fowey Yacht Club, with their customary hospitality, should permit the use of their club house, this is the best place for leaving a dinghy and for filling up with drinking water. The dinghy can be made fast to the frape, hauled out, and kept afloat. At Fowey there are boat-builders, and a sail could be repaired. All provisions, yacht fittings, oil, etc. obtainable. There is a landing at the Customs House quay; also at Whitehouse Point, whence a ferry runs across to Polruan.

In approaching Fowey from the westward, especially at high water, be very careful to edge over sufficiently eastward so as to avoid the Cannis Rock, which lies half a mile off Gribben Head. This rock covers at $\frac{3}{4}$ flood; but the seas will be noticed breaking over it towards low water. If in

any doubt, it is well to keep the opening of Fowey Harbour well to the westward until abreast of Gribben Head daymark when you are quite safe. Otherwise keep Fowey church tower (which is square with four pinnacles) in line with Whitehouse Point, bearing NE.

Springs rise 15 feet, Neaps $11\frac{1}{2}$ feet. For time of high water subtract 5 hours 40 minutes from H.W.D.

Mevagissey is a small fishing port with an Outer and Inner Harbour. It is not to be recommended wholeheartedly for, whilst affording perfect shelter in westerly winds, it is extremely uncomfortable during NE breezes even in summer time. The amount of sea which rolls in at such occasions is surprising, and if the anchors should drag there is an ugly line of rocks to leeward. At times a hard easterly wind springs up suddenly between Fowey and the Dodmans, when you will see the local small fishing craft hurrying homewards. A small yacht so overtaken by weather at high water might find it convenient to up helm and run right through the Outer into the Inner Harbour, turn to starboard and secure against the Inner Harbour East Pier. At low water the vessel would take the ground, but she would be quite safe. During easterly gales the seas break right over the piers of the Outer Harbour.

In fine settled weather, with the wind off shore, there is not much advantage in entering Mevagissey, and one might just as well bring up East of the mouth in 4 fathoms. If, however, intent on experiencing a night in Mevagissey, let go anchor abreast of the SE pier on the port hand after proceeding one cable within. The anchor should be buoyed owing to the existence of moorings, and should be only a few yards from this pier, with a kedge to the northward. There is plenty of water for vessels up to 6 and 7 feet, but some inconvenience may be caused by the powerful odour of fish and the arrival of fishing craft alongside the pier.

Spring tides rise $15\frac{1}{2}$ feet, Neaps 12 feet. At H.W. Springs there will be found $11\frac{1}{2}$ feet by the East Pier of the Inner Harbour and at least 8 feet at Neaps. For time of high water subtract 5 hours 30 minutes from H.W.D.

Mevagissey has no railway station. There is a boat-builder, and provisions, together with oil, are procurable. The harbour dues are 2s. a night plus 4d. for each successive night.

The River Fal. Apart from its great natural beauty and its many attractive anchorages, Falmouth has the additional merit of being very easy of entrance, with plenty of width and depth. For this reason it has always been popular with sailing ships through mediæval ages (when the French wine fleet used to arrive) and even down to twenty-five years ago when one could count at least a dozen barques of various nationalities lying in Carrick Roads.

In coming from the East avoid the lobster pot corks off St. Anthony. That white lighthouse (occulting white and red), with a fog bell, is a good mark when coming up from the Lizard. There is no light on the western side (Pendennis Point), nor on the isolated Black Rock which is made conspicuous by day with a black cone, staff, and globe. The latter can be left either to starboard or port. The entrance may be made in all weathers, but during fog it is preferable to use the channel East of this rock.

If intending to anchor off Falmouth itself, pass the Governor (black-and-white chequered) can buoy on either side, whence a north-westerly course will take you past the breakwaters. Within the latter are the docks. Yachts will not enter. There is plenty of room for anchoring just beyond and the current at this western side is negligible. A good berth is where the first anchor is placed in the Plan. This position is convenient for the Customs House, General Post Office, and shops, though some say that in this part of

the harbour the worm is prevalent. If stopping only a few hours, the spot is most suitable.

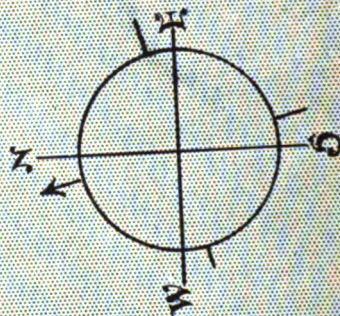
The next two anchors mark a less commercial area, though somewhat crowded with small craft, and handy for reaching the town. The third anchor is abreast of the Royal Cornwall Yacht Club, and sometimes a spare mooring may be obtained. The fourth anchor indicates an even better place off Flushing Pier, but avoid the shallow water at the southern side. A number of ferryboats during the day will be noticed rowing across to the pier from Greenbank. This facility enables you to leave the dinghy at the yacht, for the boats will call if requested. Otherwise, leave your dinghy either at Flushing or Greenbank piers. There is also a motor ferry which runs from Flushing Pier to the Prince of Wales Pier at the centre of the town.

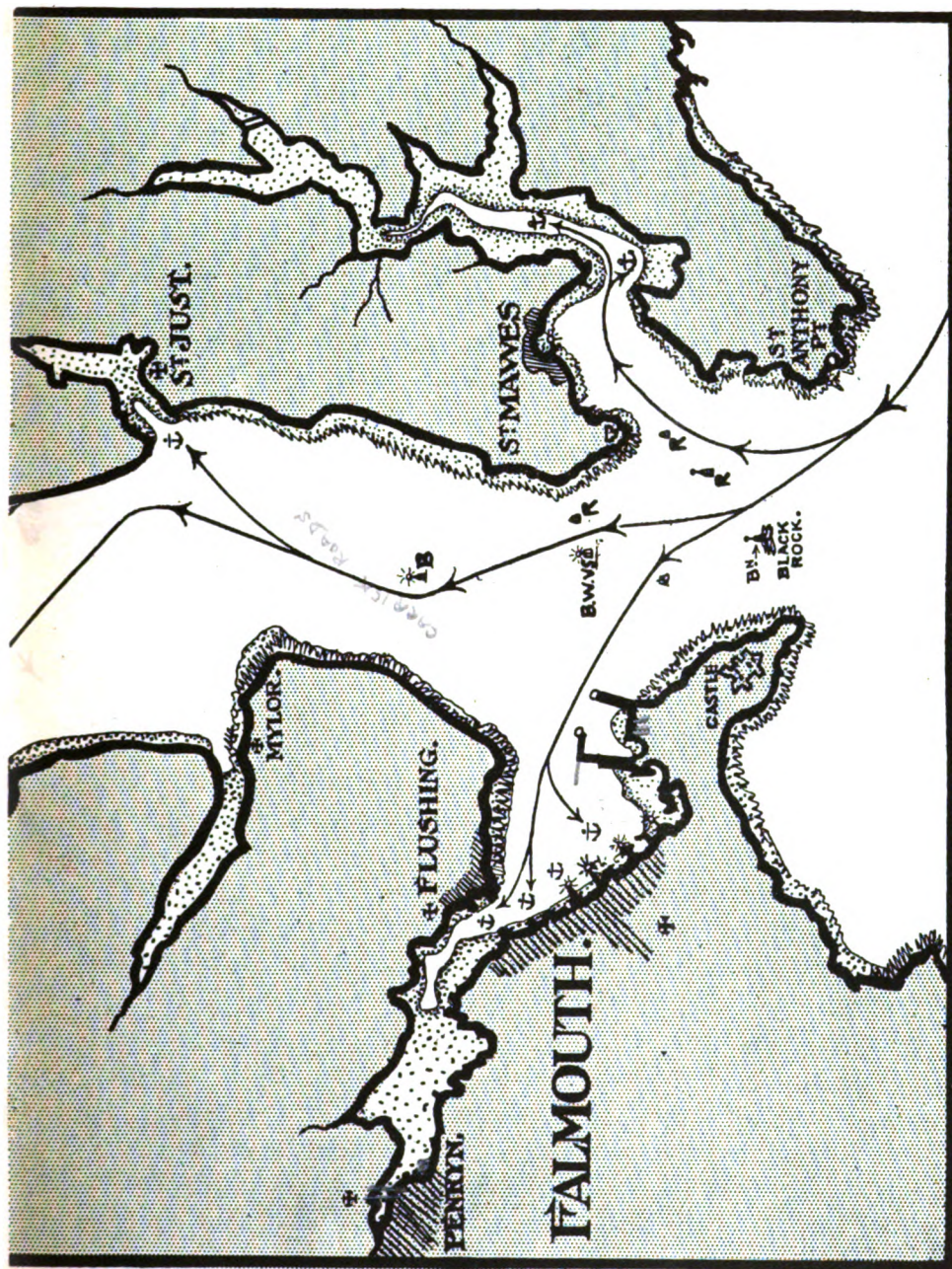
All the four berths mentioned are comfortable except in easterly gales, which usually cause damage to small craft on moorings. There is such a long uninterrupted "fetch" down the harbour that in easterly weather a stranger would find it better to bring up near the first-mentioned anchorage, under the lee of the Falmouth western breakwater. If coming in from the sea with a hard easterly wind, it is better to avoid Falmouth and make for St. Mawes Creek at the back of St. Anthony, or else go right up the River Fal.

Under any circumstances those who delight in peaceful surroundings away from towns will find St. Mawes Creek (otherwise known as Porthceuil River) ideal. The extreme southern end at the edge of the horseshoe bight, in front of Plas House, is excellent except when the wind blows freshly from the West. Beware of going too far in to the shallows, and of getting a foul anchor from the moorings of other craft. A little steamer stops in this bight for passengers bound from or to Falmouth : so supplies are obtainable. This anchorage is as pretty as the bathing from a sandy beach on the western side of the bight is enjoyable.

The RIVER FAL.

10 CABLES
TWO SEA MILES





Across the water to the NW is the village of St. Mawes, which has one or two shops besides a telegraph and post office and two hotels. But the little harbour dries out. Ignore the advice of those who recommend anchoring off St. Mawes Pier. If the wind comes SW, this is a thoroughly bad position, and more than one yacht has dragged towards the lee shore. One of the most sheltered anchorages in the British Isles is up the Porthceuil (pronounced Percewl) River where the second anchor is marked. Land at the local boat yard on the western side opposite. After the flood has made a couple of hours a delightful dinghy row up the eastern arm, followed by ten minutes' walk up a country lane and through a field, brings you suddenly to a charming beach on the English Channel. There is splendid bathing here, and usually not a soul about.

In coming up Porthceuil River give the corner on the port hand (opposite Plas House) a good wide berth. The shallows come out further than would be expected, but avoid also the Black Rock on the starboard hand. There is a well of good drinking water not far from this rock. Leave the line of moored small craft to the westward. A clump of trees on the eastern shore is a good mark for the northernmost extremity of low water navigation.

At high tide it is possible to continue to Porthceuil and anchor in a hole giving 5 feet (at L.W. Springs) just above the ferry. It would be better to have local pilotage for this last reach, as the channel is very tricky. Row up in the dinghy and inquire at the Ferry House. Further up still is a good place where a yacht on legs could remain during the winter.

In the Fal River are several anchorages which can be thoroughly recommended: (1) At the entrance to St. Just-in-Roseland Creek. Exposed in hard south-westerns. On the opposite side there is a 6-foot pool off Mylor, but wait for a sufficient rise of tide to enter. Just within Restronguet

Creek there is a deep water berth, but again wait for enough rise to reach it. The channel from St. Just up the Fal is as marked in the Plan, and takes a north-westerly trend before coming on a north-easterly course. Beware of the Carrick Carlys Rocks, and also of the small buoy at Turnaware Point just past Trelissick Point. Leave this buoy sharp to star-board and you will come to the deep, King Harry's Ferry, Reach.

At the top of the latter is (2) another good anchorage, with plum gardens near at hand. Better still, further East, is (3) a splendid berth amid ideal surroundings at the junction of the Ruan and Fal rivers. Just before reaching Malpas is (4) the most sheltered of all these up river resting places ; with a few local shops, and Truro only a few miles away. In the hardest weather these last three anchorages afford full protection.

At Flushing there is a yacht-builder's yard ; at Falmouth will be found also motor mechanics, sailmakers, ship chandlers, and all facilities for oil. A yacht can be laid alongside Flushing Pier for a scrub. At Neaps, craft ride head to wind in all the Falmouth harbours and creeks ; but at Springs a vessel is not wind-ride until four hours after high water. A most delightful walk is from Flushing eastward along the coast to Mylor, returning by the inland route. The winters at Falmouth are usually so mild that some yachtsmen sail all the year round.

Spring tides rise 17 feet. Neaps rise $13\frac{1}{2}$ feet. For time of high water add 6 hours to H.W.D.

Helford River has become over-popular since the War, yet it is still a most charming inlet affording good shelter except during heavy gales from the eastward, when it is better to clear out and make for St. Mawes, unless the yacht is small with a draught not exceeding 5 feet. In the latter case she can lie afloat in Navas Creek provided there remains

a vacant berth. It should be mentioned that though this creek is known as "Abraham's Bosom," it runs roughly North and South, so that during bad south-westerly gales it is not completely snug until the wind veers to West. The Bar off Navas Creek has not more than 1 foot of water at dead L.W. Springs. The best anchorage normally is to the southward, that is to say between the Navas Bar and Penavon Point in 2 to 3 fathoms. Get in out of the tide towards the northern shore but use the sounding lead. An even more sheltered berth would be further West up Helford River in 6 feet just off Frenchman's Creek, but oyster beds exist West of Penavon Point. The anchorage off Durgan is recommended in northerly winds, if one is staying temporarily, and it has an excellent bathing beach.

The dangers to be avoided in regard to Helford River are as follows: In coming from Falmouth be alert to give the Gedges Rock, which dries 9 feet, a good wide clearance. Similarly, in leaving Helford River for Falmouth, do not head up for St. Anthony until this rock is well passed. The recognized mark for clearing the Gedges is to keep Pennance Point open of Rosemullion Head bearing NNE.

In coming up harbour from the sea look out for a white house at Lower Calamansac, West of Navas Creek, and keep this bearing W by $N\frac{1}{2}N$ at first. But beware of the dangerous ledge on the South side now known as the Bona reef since a yacht of that name came to a disastrous end at this tricky projection. Also beware of an isolated pinnacle immediately to the westward of this ledge.

Now edge over somewhat to the southern shore, when past these dangers, and avoid the extensive bar which comes so far out from the northern side that strangers sometimes get aground. When past the narrows, bear up to the NW and anchor as previously indicated. The tide on the southern shore past Helford Point runs fairly strongly. A ferry runs across to Passage. The upper river and creeks of Helford

River may be explored in the dinghy on the flood. At Helford village paraffin can be obtained, and petrol at Port Navas where there is a quay alongside which a yacht could lie at high water. A few simple supplies can be bought at Helford, and dairy produce. Small excursion steamers from Falmouth visit Helford River. Spring tides rise $17\frac{1}{2}$ feet. Neaps rise 14 feet. For time of high water add 5 hours 50 minutes to H.W.D.

The Lizard. This headland, like Portland Bill, the Start, and others, must be treated with some respect. Endeavour to time your arrival so as to carry a fair tide. The stream round the Lizard goes West at 3 hours 45 minutes before H.W.D., and goes East at 1 hour 45 minutes after H.W.D. As the velocity is 3 knots at Springs, a weather-going tide in any case kicks up a sea. But this is further complicated by the existence of a race, so that it is advisable ordinarily that a small craft should keep three miles off when rounding. The best time at which to arrive off the Lizard is just when the tide is turning in one's favour.

Porthleven, which lies between the Lizard and Mount's Bay, is one of the very few harbours that must not be attempted by the yachtsman without a pilot, but it has no special attractions and dries out. In bad weather Porthleven cannot be attempted.

Penzance Harbour gives good shelter (subject to certain limitations), and is a convenient port of departure when bound to Ireland, North to Milford Haven, or across to the Scillies. The entrance is 100 yards wide between the northern and southern piers, which enclose (a) the large northern harbour that dries out, and should not be used by visiting yachts, and (b) the basin, which is at the southern end, and is entered by means of gates which

usually open from 2 hours before till 1 hour after high water.

Enter this basin, and secure alongside the North wall where a craft drawing less than 10 feet can lie afloat in safety. There is a certain amount of dust and dirt which fouls deck and spars, but the southern wall is worse and in SE gales the seas sweep over. Whilst waiting for tide time anchor either in Gwavas Lake, a bay SW of Penzance, in $1\frac{1}{2}$ fathoms, sheltered from SW winds; or else bring up temporarily at a convenient distance off Penzance southern pier. As soon as two balls are hoisted from the flagstaff on the latter, you may know that the dock gates are open. Spring tides rise 17 feet, Neaps rise 13 feet. For time of high water add 5 hours 40 minutes to H.W.D. Repairs to ship, engine, or sails can be made locally, and all stores obtained.

Penzance (= "holy headland") is famous for its flowers and sub-tropical plants. From here the steamers run to the Scilly Islands.

Newlyn is a fishing harbour lying between Penzance and Mousehole. In approaching Newlyn from the South beware of the Low Lee rock, which is marked by a black-and-white striped can buoy. There are not more than 4 feet of water over this obstruction at L.W. Springs. Beware, also, of the Carn Base rock, which is further North and likewise carries 4 feet.

The harbour dries out as to its western half, being formed by two piers. The North pier is 550 yards long, but there is now plenty of water for a yacht to lie alongside here afloat at all states of the tide. The drawback is that Newlyn may be exceedingly crowded with the fishing fleet, in which case anchor in Gwavas Lake, but if the wind comes easterly go into Penzance basin. Yachts can obtain the usual provisions and oil at Newlyn, whose tides are identical with

Penzance. Newlyn is, of course, as famous for its pilchards as its school of painters.

Mousehole Harbour, which is inside St. Clement's Island, thus obtains shelter from easterly winds, but it dries out, the bottom being gravel on rock. It is quite a small port formed by two piers, the entrance being only 12 yards wide. At H.W. Springs the depth is 13 feet, and at Neaps 9 feet. Enter by the South entrance, which however (like Polperro) is liable in bad southerly gales to be closed by baulks of timber.

Mousehole (pronounced Mouzell) is the last harbour on the mainland before rounding Land's End.

NOTE. The tide goes North round Land's End from just after H.W.D., and runs South at about 6 hours later. Thus a vessel bound, say, to Padstow or Milford Haven will time her departure from Mount's Bay so as to carry the stream not merely round Land's End but for some hours along the North Cornish coast.

Beware of considerable traffic near the Longships.

The Scilly Islands lie 21 miles from Land's End, but small craft in making the crossing are exposed to the Atlantic, and the passage should never be undertaken when the weather threatens to be thick or the glass is not set fair. These islands can be sighted usually from a distance of about 12 miles. St. Mary's is the largest and principal island, and the approach should be made by St. Mary's Sound. There is a conspicuous telegraph tower and wireless mast at the NW, which is the highest part of the island. Hughtown, the capital, is at the SW end.

The first object to be sighted in coming from the East is St. Martin's Daymark, which is at the East end of St. Martin's Island and looks like a lighthouse. Be careful not

to take it for either St. Agnes Island's disused lighthouse (now a white beacon 74 feet high) or for Round Island lighthouse which it much resembles. (Round Island lighthouse is 180 feet high : St. Martin's Daymark is 185 feet high.)

St. Martin's Daymark has white and red horizontal stripes and is on the highest part of the north-easternmost island of the Scillies. Presently, between St. Martin's and St. Mary's you will see the Hanjague islet. St. Agnes Island is SW of St. Mary's Island, being separated by St. Mary's Sound. Tresco Island is NW of St. Mary's, and will be recognized by abbey ruins. There is well water to be obtained here. Land near Crow Point. Bryer Island is West of Tresco.

The following three anchorages are to be noted : (1) St. Mary's Pool ; (2) New Grimsby ; (3) Old Grimsby.

(1) Pass through St. Mary's Sound, and make for the bay on the West side of St. Mary's Island. This is called St. Mary's Pool, on which is Hughtown. To enter this pool, get a conspicuous white stone in line with a beacon (6 feet high) having a staff and triangle. These are on the East shore of the pool. Keep them bearing ESE, and they will lead you between Bacon Ledge and the pierhead. Anchor on these marks off the pier.

(2) New Grimsby. There is anchorage for small craft between Cromwell's Castle (on Tresco) and Hangman Islet (off Bryer Island).

(3) Old Grimsby is on the NE side of Tresco, but it is somewhat exposed and has to be approached through shoals.

If approaching the Scillies from the South, the first objects sighted will be the Bishop Rock lighthouse (143 feet high), the telegraph tower on St. Mary's, St. Agnes' disused lighthouse, also the Round Island lighthouse. During thick weather use the utmost precaution if approaching the Scillies from the South or West.

Spring tides rise 16 feet. Neaps rise 12 feet. For time of high water add $5\frac{1}{2}$ hours to H.W.D.

CHAPTER VI

LAND'S END TO SOLWAY FIRTH

NOTE. The harbours on the North coasts of Cornwall and Devon are not ideal for yachts. This remark applies also to the Bristol Channel ports. If bound up the Irish Sea, it is preferable to make a non-stop run from Penzance to Milford Haven. Nevertheless the following particulars of the best intervening harbours are given.

St. Ives. The harbour is sheltered from westerly winds, but dries out. At H.W. Springs there is a depth of 14 feet, and 8 feet at H.W. Neaps. Although protected by piers, it is exposed to a heavy swell in northerly gales. The bottom is of sand. In approaching St. Ives, give the coast a berth of a mile after passing Pendeen Light. Then round Battery Point, looking out for Hoe Rock and Merryn Rock. A stone obelisk 545 feet high at the back of the town, known as Knill's Monument, in line with the ivy-clad, battle-mented, Tregenna Castle Hotel, which is NE of this obelisk, leads clear of the above rocks. The SE end of the old breakwater is marked by a conical black buoy with staff. During the herring season this harbour is crowded, but in suitable weather a yacht may anchor temporarily in St. Ives Bay, East of the piers.

Repairs of all kinds can be made at St. Ives. Provisions and oil obtainable.

Spring tides rise 23 feet, Neaps 17 feet. For time of high water add 5 hours 53 minutes to H.W.D.

Hayle Estuary is on the East side of Carbis Bay. In the 5th century it was the landing place of Irish saints. In more recent times Hayle had quite a big trade. To-day there are still rope-walks, timber yards, foundries, but the fairway is narrow and the bar dries out at L.W. Springs so that there is not much traffic. Whilst there is excellent shelter, and there is a depth of 20 feet over the Bar at H.W. Springs and 14 feet at H.W. Neaps, the entrance must not be attempted in bad weather.

The best time to enter is at half flood. Leave the black Bar buoy at the entrance to starboard, and then steer with the Low Light and High Light in line. Leave a second (but small) black can buoy, which marks the Western Spit, also to starboard. Now carry on with the two lights as before, and you will pass 5 perches to starboard marking a half-tide embankment. Keep close to these. The two lights consist of a black lantern and a red lantern, respectively, each on a pile beacon, and are not illuminated until there are at least 12 feet on the Bar. They are placed inshore of Chapel Anjou Point, which is the western point of the entrance.

At Chapel Anjou Point alter course to port, leaving the embankment to starboard, and bring up to dry out alongside one of the quays.

The usual stores and repairs are obtainable. Spring tides rise 21 feet 6 inches. Neaps 15 feet 6 inches. For high water add 5 hours 55 minutes to H.W.D.

Newquay Harbour, though well sheltered from all winds, except N and NE, dries out at low water. The town is built on a high cliff, and there are immense stretches of excellent sands for bathing, with rocky coves. The harbour is formed by two piers, namely North and South, enclosing three acres. The entrance is extremely narrow, measuring only 80 feet, and a considerable run comes in even during the summer. Turn to port on entering, secure alongside

with two heavy hawsers at bow and stern, but be prepared for discomfort. This is another of those harbours which must not be attempted during an onshore gale.

In fine settled weather there is a good anchorage outside in 2 fathoms, but clear out immediately on the approach of a disturbance, as the breakers will render the position impossible. When coming into Newquay beware of small rowing boats alongside pier.

At H.W. Springs there is a depth of 17 feet, with 12 feet at Neaps. The time of high water is 10 minutes earlier than at Hayle.

Padstow is the only real harbour between Land's End and Bideford, but has a sinister reputation. Outside a yacht is exposed to the full force of the Atlantic, and the sight of the breakers on the Bar is not pleasant. Big rollers and a mass of foam. The channel and banks are frequently altered, so only the latest information should be relied upon. The river tends to be silted up with sand, in spite of the many thousands of tons which are removed yearly.

The entrance has Pentire Point on the North and Stepper Point on the South. The latter is 227 feet high with a conspicuous daymark, resembling a chimney, 40 feet in height. Near to this the pilots maintain their lookout, and are always at hand by tide time whether day or night, and come off when signalled. In *fine* weather a yacht may bring up temporarily in Hawker's Cove. The deep water lies close to the shore, but when the wind is onshore there is precious little room for swinging clear of the rocks which are here steep-to. A convenient berth is just ahead or astern of the motor lifeboat, and French crabbers are accustomed to take refuge at this spot. Nevertheless, there may be a nasty lop even if this is a weather shore, and a small vessel will be considerably tried as she sheers about and rolls broadside on to the swell. The danger is that her cable

might snap and the ship be dashed ashore, in which case a landing could probably be made on the rocks below the Coastguard Station. It is better to go right into the harbour, where shelter can be obtained. The best time to enter is at high water. After rounding Stepper Point, avoid Clouter Rock, which dries 2 feet, and cross the Doom Bar on its East side. This bar keeps down most of the sea from reaching the harbour, except at high tide. Have the sounding lead going all the while, for the Doom Bar channel is apt to shift. Go between the two buoys (though their existence and position cannot be implicitly relied upon) into the channel which runs roughly North and South. Anchor in the Pool, and lay out a kedge.

If compelled to cross the Doom Bar before sufficient rise of tide, you may bump badly in the trough of a wave. When coming round Stepper Point under sail watch your steering because of the seas and fluky wind. Keep close to the rocks. The sea here is worse on the ebb. Storm signals are displayed. If compelled to anchor off Hawker's Cove, remember that the holding ground is indifferent. After letting go both anchors, a rope can be secured to the shore. Yachts with auxiliary power should use it entering or leaving.

Spring tides rise 22 feet. Neaps rise 17 feet. For time of high water subtract 5 hours 40 minutes from H.W.D. At Springs the velocity of the tide is 3 knots.

Appledore and Bideford. Neither Boscastle nor Bude can be recommended, and Bideford (though rich in its historical associations with Elizabethan seafaring) is one more of those difficult harbours.

Bideford Bar has a bad reputation. Exposed to the Atlantic and prevailing West winds, this entrance has dealt cruelly with generations of ships. Even in moderate weather the ebb tide creates a nasty sea. The channel in places is only 100 yards wide, its general trend being to the SE.

The ebb tide comes swirling down with overfalls and eddies, and the most cautious navigation is necessary under these conditions, for a sailing vessel missing stays is liable to get ashore near the entrance and either be lost or seriously damaged.

There is plenty of water for crossing Bideford Bar at half tide when there should be at least 14 feet, but the velocity is $3\frac{1}{2}$ knots on the flood and 3 knots on the ebb. In fresh westerly winds it is not advisable for strangers to attempt coming through the heavy breakers. (Run for Clovelly Roads or Milford Haven instead.)

In approaching, pick up the Bideford Fairway red bell buoy (with staff and globe), moored off the entrance in 7 fathoms. Thence proceed by keeping the leading lights in line—see below—passing the Bar buoy (black, conical) to starboard, and the Middle Ridge as well as the Pulley buoys also to starboard. The two latter are black, conical, and moored on the South side of the river, but their positions may be moved periodically owing to the shiftiness of the channel.

Having passed the Bar buoy, the river soon deepens, but suddenly narrows abreast of the Middle Ridge buoy, which must be passed quite close. After the Pulley buoy the channel shoals. The black-and-white vertical-striped Sprat Ridge can buoy on the North side is left to port. In entering with the flood keep well to starboard lest the tide set you on to the Sprat Ridge. Anchor at Appledore Pool in 12 to 26 feet. All repairs can be carried out at Appledore, where there exist dry docks, patent slip, and gridiron.

North of the entrance, on the shore, and near the lifeboat house is the Bideford Bar lighthouse, 35 feet high, consisting of red framework. But the two leading lights are at Braunton, on the North shore of the river SE of the Bar lighthouse. The upper (rear) light tower is octagonal, 86 feet high, white with red stripe. It is placed on the SW corner of Braunton

Burrows near high water mark. The lower (front) leading light is to the NW of the former and is shown from a hut 15 feet high, but similarly painted. This light can be shifted periodically, by means of a tram line, to suit the change of the sandbanks. When there are not less than 15 feet on the Bar at night, this lower light shows white: when less than 15 feet it shows red. By day a red ball is hoisted to indicate at least 15 feet.

Spring tides rise 24 feet. Neaps rise $16\frac{1}{2}$ feet.

For time of high water subtract 4 hours 54 minutes from H.W.D.

Ilfracombe. In fine weather, if stopping only a tide, anchor North of the harbour entrance in 2 to 3 fathoms. The harbour dries out. Spring tides rise 25 feet, Neaps rise 19 feet, so that at half flood you can enter and berth alongside. If anchoring in the Outer Harbour beware of fouling mooring buoy chains. For time of high water subtract 5 hours 15 minutes from H.W.D. Provisions and oil available.

Tenby Harbour dries out, and a berth can be found alongside the pier. But in calm weather a yacht without legs will prefer to keep afloat at anchor in Priory Bay, Caldy. Spring tides rise 25 feet, Neaps rise 18 feet. For time of high water subtract 5 hours 15 minutes from H.W.D. If drawing not more than 6 feet, a craft can enter Tenby any time after $\frac{1}{2}$ flood, but the harbour is exposed to NE winds, and even in gales from the SW it is not too comfortable as the sea manages to work round. There is good anchorage in Tenby Road, with tenacious holding ground, during winds from SW through W to NNE.

Caldy Road. Use the lead and get in as close to the shore as possible in Priory Bay, which is on the North side of Caldy

Island. Whilst the shelter is good, there is not too much comfort if it is blowing hard outside even from SW. During E winds it is an exposed anchorage. Caldý Sound lies between Caldý Island and Giltar Point, and the tide runs at $2\frac{1}{2}$ knots Neaps, increasing to 4 knots at Springs. Hence the reason for getting close to the island shore. Except when stopping temporarily, it is preferable to make for Milford Haven. Landing is permitted by the monks on Caldý Island.

Milford Haven has a wide entrance which can be made at all states of the tide, except that for small craft during a SW gale when the ebb tide is making out the harbour should not be attempted. As an instance of this, it may be mentioned that in December 1915 the steam drifter *Ferndale*, whilst trying to enter Milford Haven, was lost with all hands. In ordinary weather the entrance is both safe and easy. On the West side is St. Ann's Head lighthouse, 159 feet high, and its powerful light is visible 18 miles, but there is the additional help of the Great Castle Head leading lights which are visible 14 miles. Between Penzance and Holyhead this is the best harbour, with deep water and a well-buoyed channel.

To enter steer NE by E for the Great Castle Head light-houses in line. By day they will be noticed to be white with black band, the low light being 76 feet high and the high light 112 feet. Carry on with these, leaving to starboard both the Middle Channel Rocks (red conical buoy with staff and globe) and the West Chapel Rocks (red conical buoy). In bad weather, especially with wind against tide, these rocks should be given a wide berth. Next alter course to the eastward when the first black-and-white chequer can buoy so bears. Go for it, leave it close to port, but leave the next black-and-white chequer can buoy well to port, and so proceed till you are abreast of No. 5 conical buoy (which is the third you will have passed to starboard on this course). Leave the Weare Point chequer can buoy to port and the

channel will then trend ENE. Keep between the buoys till Neyland, passing Pembroke Dockyard to starboard.

Beware of the mud flat which extends South from Milford. There is, however, a channel through the same, which runs North and South. Craft may bring up off Milford, but with wind against tide it is an uncomfortable berth, and it may become too sloppy for dinghy work. All provisions, rope and other yacht stores, repairs of all kinds, can be procured at Milford. At tide time enter the dock gates which are open by day when a blue flag is shown from a flagstaff at the East Pier head, or by night when 2 red lights are exhibited vertically from a post. In bad weather likely to last a few days, it is better to go into this dock. Choose a berth to the North, at the top end, away from the steam trawlers. Here you will be quite snug and out of the way.

Milford Haven tides are fairly strong, but in Dale Roads there is very little stream. If staying only a night, this latter is the most suitable anchorage. Let go in the SW corner in $1\frac{1}{2}$ fathoms. There is a beach for landing, and fresh water can be obtained. The holding ground is good except that there is so much seaweed in places that a light anchor may fail to get a satisfactory bite. If the wind comes E, SE, or even sets in strongly from S, this is not the best of berths; but with SW or W or NW winds it is capital. Dale village provides a few supplies. Coasting ketches from Bideford, and topsail schooners from the South of Ireland, waiting a shift of weather, sometimes bring up in Angle Bay.

There is an old-world character about Pembroke ashore, though the dockyard has been in existence but a century, and there are plenty of shops. The anchorage for small craft is to the SE of Neyland Pier, but get into shallow water away from moorings and out of the tide. The town landing is at Hobbs Point. Fresh water from a house at the head of the jetty. But the best berth of all is above Pembroke at the mouth of Cosheston Pill, which is landlocked and snug.

Stores can be obtained from Cosheston cottages. There is plenty of water still further up the river, even above Lawrenny, where the scenery is charming, though the holding ground is not universally good.

At Pembroke Spring tides rise $22\frac{1}{4}$ feet. Neaps rise 17 feet. For time of high water subtract 5 hours from H.W.D.

When proceeding North after leaving Milford Haven, remember that there is a $2\frac{1}{2}$ -knot-tide between Skokham and the mainland, whilst between Skomar and Grassholm Island the tide has a velocity of 2 to 4 knots. To avoid the tide races, pass 2 miles East of Grassholm and about the same distance West of both Skokham and Skomar. Very nasty seas get up hereabouts. At Skomar small craft can take the risk of anchoring for a tide in North Haven during southerly winds, but it is exposed to NE winds and in any case there is sure to be some swell. Let go in the middle of the cove. There is a landing at the head of the cove, and a farmhouse is at the western end of the island. Skomar contains many seabirds, but it is a wild spot.

Fishguard Harbour. This is a welcome anchorage after the confused seas and races of Grassholm, Skokham, Skomar and the Bishops (where the tide runs 5 knots). Strumble Head, 700 feet high, with its white circular lighthouse is a conspicuous landmark. If hugging the shore to cheat the tide, beware of two small rocks immediately West and East respectively of Strumble Head. There is also a tide rip off Pen Anglas. Fishguard is a very easy harbour to make, even by night. The northern breakwater is over 830 yards long, and this gives protection from North winds. Whilst the harbour is snug in SW gales, it is exposed to NE and E winds. At the SE end there is another breakwater. Gales from NE, and even N, send in a nasty run.

The only cautions are to avoid the Cow and Calf rocks

NW of the northern breakwater, and at night keep an eye lifting for the mooring buoys. There is plenty of water till you find 2 fathoms at the SW end. Drinking water can be obtained by going alongside the quay. There is no tidal stream. South of the lifeboat house there is a convenient slip for landing and leaving the dinghy. Stores can be obtained ashore, and there is a good hotel. A good anchorage is abreast of the lifeboat house. The northern limit of the anchorage area is marked by two white posts with diamond-shaped tops. These two white beacons are situated on the hill behind the G.W.R. quay, and at night exhibit each a green light. Before bringing up be careful that you are South of these two in line, and well clear of the fairway. Mail steamers run to Ireland.

Spring tides rise 12 feet 4 inches. Neaps rise 8 feet 10 inches. For time of high water subtract 4 hours from H.W.D.

Holyhead. Between Fishguard and Holyhead there exist no really satisfactory harbours capable of entry in all conditions, where one can lie always afloat and protected from every wind. Aberystwyth, for instance, has a shallow bar and a harbour that dries. Aberdovey cannot be entered during the prevailing SW wind when at all fresh. The same applies to Barmouth. Port Madoc dries out. On the other hand Pwllheli is too small and crowded, besides being dangerous of entry with an onshore wind.

Holyhead is an easy harbour to make, though this coast is subjected to heavy seas. When approaching from the North, beware of the tide rip at Langdon Ridge. The Skerries are a nasty place if caught out. There is a strong tide with ugly overfalls, and a berth of 2 miles should be given by small craft. If approaching Holyhead from the South it is better to keep 2 miles away from both the South and North Stack; for the race extends at least $1\frac{1}{2}$ miles,

though it is at its worst a half-mile off shore. The tide also runs at 5 knots, so that with a fresh breeze against it a really bad sea develops.

The South Stack is readily identified by its white circular lighthouse and white buildings which are conspicuous. There is also a fog reed signal. The North Stack has no lighthouse but has a fog signal station, a gun and explosive being fired alternately.

To enter Holyhead Harbour, pass between the end of the breakwater and black-and-white vertical striped bell (light) buoy off the Clipperra Rocks. There is a red flashing light at the end of this breakwater. Do not enter the railway harbour, but bring up in the New Harbour at the SW corner in about 2 fathoms near the breakwater. There is no current. If entering at night or in foggy weather, be alert for the mail steamers. There is a fog bell at the end of the above-mentioned breakwater.

Spring tides rise 16 feet. Neaps rise $12\frac{1}{2}$ feet. For time of high water subtract 45 minutes from H.W.D.

Beaumaris. The Menai Straits are about 20 miles long, and only 300 yards wide at the bridges. The tide runs strongly and at 8 knots during Springs. At the SW entrance will be found about 7 feet at low water, but this should not be attempted without local aid. The NE entrance to the Straits, however, is practicable and well buoyed. Approach either by the NW Channel or the NE Channel, either of which can be used at all states of the tide by a vessel drawing 6 feet. At Beaumaris there is a pier with a fixed light. Anchor in the roadstead abreast of the town on the island side, where the holding is good. Land at the pier. All stores and repairs obtainable.

Spring tides rise 23 feet. Neaps rise 16 feet. For time of high water subtract 25 minutes from H.W.D.

Bangor. The channel from seaward is well marked. Leave the black can buoys to port, and the red conical buoys to starboard, with the exception of the red conical buoy at the South extremity of Puffin Island causeway. Anchor in Bangor Pool. All stores and repairs obtainable. Tides as at Beaumaris.

Conway. When coming from the NE entrance of Menai Straits in the direction of Great Orme's Head beware of the indraught into the bay. The stream runs into the Conway river for only $4\frac{1}{2}$ hours but ebbs during $7\frac{1}{2}$ hours. There is a strongish tide—3 knots at Neaps rising to 5 knots at Springs. A yacht drawing 6 feet should wait till $2\frac{1}{2}$ hours flood before entering. First identify Penmaen Bach Hill, and then locate the red-and-white, horizontal striped, spherical Fairway buoy having a staff and diamond. This buoy lies roughly NW of Penmaen Bach Hill, and must be left well to port. Next will come half a dozen red conical buoys, numbered 1 to 6. Leave these to starboard. You will then come to a light beacon on the North end of Mussel Hill (which is on the South side). Leave this a good distance to starboard and steer to the North of NE so as to clear the shoal. The channel then trends southerly, but the best water is over on the eastern shore, keeping just clear of Deganwy quay. Anchor either off the latter, or off Conway in 2 fathoms in the vicinity of other small craft. Yachts can be scrubbed, repaired, or laid up for the winter. Moorings can be hired. Inquire at the yacht yard.

It should be added that the channel is narrow at the best of times, and the possibility of its shifting must be borne in mind by strangers.

Spring tides rise about 25 feet. Neaps rise about 19 feet. For time of high water subtract 26 minutes from H.W.D.

Liverpool. Great Orme's Head, with its white lighthouse on North Toe Point, is very conspicuous and easy of identification. If making for Liverpool, it should be remembered that the entrance channels and buoys are frequently altered : only the very latest charts should be used. Make for the Bar Lightship, which has a red hull, two masts, red tower, and ball topmark, and fog siren. Enter by the Queen's and Crosby Channels, which are wide, deep, splendidly marked, and affording ample water always for any yacht. The North side of Queen's Channel is marked by light floats, and the South side by light buoys. The tides are strong. This is not an ideal port for yachts, but the best anchorage is off Rock Ferry Pier, which is lighted and has a fog bell. Use the lead and get in out of the tide as much as possible, though this berth is disturbed by the wash of steamer traffic.

Spring tides rise 29 feet. Neaps rise 23 feet. For time of high water add 16 minutes to H.W.D.

Fleetwood, with its fine fleet of steam trawlers, is the Grimsby of the West coast. Make for Lune lightboat, painted red, having " LUNE " on its sides and one mast. It also has a flashing light and a bell. As this lightboat is moored on the North side of Lune Deep, it must be left to port when entering from seaward. The NW Boulders red conical buoy, having a cage topmark, and the King Scar red conical buoy, which is moored on the North edge of the King Scar bank, must both be left to starboard. The Danger Patch black-and-white can buoy which is at the South edge of the Danger Patch bank must be left to port. There is a depth of about 15 feet on the Bar. The channel to Fleetwood is marked by red conical buoys on the West side, the first being the Fairway buoy with a flashing light. On the East side is a series of black can buoys. The channel lies between the red and the black, but watch the set of

tide. At the NE end of the North Wharf bank is the Wyre lighthouse on screw piles, and it is here that the Wyre joins the Lune Deep. A stranger might do well either to get local advice or follow one of the incoming trawlers. Enter the Wyre wet dock, as instructed by the Dock Master. The entrance can be made therein from 2 hours before to 2 hours after high water.

Spring tides rise $28\frac{1}{2}$ feet. Neaps rise 22 feet. For time of high water add 10 minutes to H.W.D. All stores and repairs procurable.

NOTE. The other harbours between Fleetwood and the Mull of Galloway cannot be recommended to yachtsmen, and are not likely to be used except for some special reason. Morecambe Bay, with its strong tides and treacherous shoals; Barrow-in-Furness, with its shipbuilding works; Whitehaven, with its acres of mud and coal dust; and dismal Maryport further North, should all be avoided. But Fleetwood is convenient for breaking the journey when bound to or from Scotland calling at the Isle of Man, the distance from the Lune Deep light buoy to Douglas Head being about 50 miles.

(For Isle of Man ports see Chapter VII.)

CHAPTER VII

ISLE OF MAN HARBOURS

To Douglas Head on the East side of the Isle of Man the distance from Whitehaven is 39 miles ; from Barrow 46 miles ; from Fleetwood 50 miles ; from Liverpool Bar Lightship 55 miles ; from the Skerries (Anglesey) 45 miles. If crossing from the Mull of Galloway to the Point of Ayre (the NE extremity of the Island) the distance is only 21 miles, but the tides are peculiar. Thence it is 19 miles to Douglas, but a mere $5\frac{1}{2}$ miles to Ramsey.

Douglas Harbour consists of an Outer and Inner portion. The latter dries out. Douglas Head is immediately to the southward with a lighthouse which has a reed fog signal. The entrance is between the Victoria Pier to starboard and the Battery Pier to port, the first mentioned exhibiting a fixed green light, and the second a fixed red light. Enter with confidence and steer towards the SW of the harbour. In this corner will be seen the lifeboat station. Bring up off here in about 2 fathoms, and then run a line out to a buoy or else lay out a kedge. You will keep afloat at this spot all the time, and be sheltered from SW winds, though SE winds make the berth uncomfortable. When approaching from the South, beware of the heavy squalls off Douglas Head during westerly winds.

All supplies available. Spring tides rise 22 feet. Neaps rise $18\frac{1}{2}$ feet. For time of high water add 17 minutes to H.W.D.

Ramsey. The harbour dries out, but there is secure anchorage in 3 fathoms to the North of Queen's Pier in all winds from NNW through West to SW. All provisions and motor fuel procurable. Spring tides rise 20 feet. Neaps rise 17 feet. For time of high water add 15 minutes to H.W.D.

Peel Harbour dries out, but there is good anchorage close to the outer end of the breakwater in $1\frac{1}{2}$ fathoms where you will find shelter in all winds from NW through South to East. All provisions and motor fuel procurable. Spring tides rise 17 feet 10 inches. Neaps rise 14 feet 9 inches. For time of high water add 15 minutes to H.W.D.

Port Erin. Beware of the ruined breakwater stretching out in a northerly direction from the South shore. This obstruction is covered at high water Springs, but its northern end is marked by a red conical buoy. By day leave the latter to starboard and carry on to the ESE, selecting an anchorage off the lifeboat slip on the South shore in $3\frac{1}{2}$ fathoms. Here you will be sheltered from North through East to SSW. When entering by night you will see a front and rear fixed red light on the East shore. Keep these two leading lights in line. All provisions and motor fuel available.

Spring tides rise 16 feet. Neaps rise 13 feet. For time of high water add 25 minutes to H.W.D.

Port St. Mary. The harbour dries out, but anchor off the end of the breakwater in 2 fathoms where there is shelter in all winds from NW to SW through West. Yachts of 5 feet draught can bring up just behind the end of the breakwater. All provisions and motor fuel procurable. Spring tides rise 22 feet. Neaps rise 18 feet. For time of high water add 16 minutes to H.W.D.

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Castletown Bay provides shelter in all winds from NW through North to SE. The harbour dries out. In entering the bay will be seen a black can buoy which marks the Lheeahrio Rocks, which must be left to port. Anchor to the East of this buoy. All provisions and motor fuel procurable.

Derby Haven is sheltered from West and SW winds, when Castletown Bay is untenable. Anchor in the middle of the Bay in 2 fathoms, but the Haven dries out.

Spring tides rise 22 feet. Neaps rise 18 feet. For time of high water see Port St. Mary.

CHAPTER VIII

ROUND IRELAND

(FROM ROSSLARE NORTH ABOUT)

NOTE. When making a passage from the English Channel up the Irish Sea bound for Scottish waters, many yachtsmen in small craft after calling at Milford Haven or Fishguard prefer to cross over and work the East coast of Ireland, thence traversing the North Channel. The advantage of this route over that following the coast of Wales and NW England is the number of useful harbours and anchorages well suited for yachts of light to moderate tonnage.

In making the SE Irish coast, Carnsore Point is a rocky eminence 54 feet high, with flagstaff and semaphore. Tuskar Rock is 6 miles to the eastward with a lighthouse 108 feet high. Keep 4 cables off the Tuskar. The tide here goes NE when the tide is rising at Liverpool, and SW when it is falling at Liverpool. The distance from Fishguard to Rosslare is only 62 miles, so that in any normal summer's day it is capable of being covered by even a 5-tonner between dawn and dusk.

Yachts entering Free State waters are regarded as arriving from foreign.

Rosslare Harbour is formed by a semi-horseshoe shaped breakwater, the southern portion consisting of an open viaduct which curves to the NW. The entrance is perfectly simple. Anchor in $2\frac{1}{2}$ fathoms about 1 cable SW of the NW extremity of this breakwater, but out of the fair-way for the cross-Channel steamers. Whilst this anchorage is

safe with winds through South to WNW, it is not particularly peaceful or interesting. When the wind is anywhere between WNW and ENE (through North) a nasty jobble comes in. SE winds at high water drive in an unpleasant sea. Even with good anchors and plenty of scope to the cables, a yacht lying to a NW gale might be in danger. Keep clear of the G.W.R. steamers' warping buoys.

Drinking water can be obtained from the breakwater, at the western side of which are landing steps. Some stores and motor fuel are obtainable. There is a Post Office. Harbour dues are charged.

Rosslare is recommended only as a port of convenience after crossing the Irish Channel and proceeding. A noticeable feature of the East Irish coast South of Bray Head is the very small rise and fall. At Rosslare Harbour Springs rise 6 feet, Neaps only 4 feet. For time of high water subtract 5 hours from H.W.D.

Wexford Harbour, because its channel is frequently shifting and silting, is one of the few harbours where it is most advisable that entrance should not be attempted without a pilot. It is very difficult for a stranger to find his way. The buoys (which cannot be relied upon) consist of red conical, left to starboard on entering, and black can which are left to port. Where triangular-topped perches mark the fairway, those of red are similarly left to starboard, and those of black to port. Beware of the training walls, when covered, to the SE and NE of the town. Anchor off Wexford in 3 or 4 fathoms.

The Bar carries about 5 feet. Spring tides rise 5 feet, and Neaps rise $3\frac{1}{2}$ feet. Yachts should take a pilot at Raven Point, his boat consisting of a motor craft with "Pilot" on either side. The best time to enter is between 2 hours before to 2 hours after local high water. For time of high water subtract 3 hours 25 minutes from H.W.D.

Arklow Harbour provides perfect shelter, and there is also a basin where you can lie afloat in 12 feet. It is better to enter under power as the piers blanket the sails; the entrance is very narrow, and the stream is usually running out. There is a Bar at the entrance which normally has at least 7 feet, but there may be at times a couple of feet less. SW winds tend to deposit silt to the North of the entrance, so keep South of the lighthouse on the South Pier when coming in. Pilots are scarcely necessary, and they will usually come off in any case; but a bargain should be made before accepting their services. (Do not pay more than 1s. a ton, Thames Measurement, at the most.)

Hug the South Pier for the best water, when entering; then keep on the South side as you proceed up harbour. If making only a temporary stay, secure alongside the wooden jetty at the inner end of the stone pier on the port hand. If making a longer visit, enter the basin via the swing bridge which will be opened on request. In fine weather, with offshore wind, one can anchor outside clear of the harbour entrance.

Spring tides rise only 4 feet, Neaps 2 feet 10 inches. For time of high water subtract 2 hours 45 minutes from H.W.D. Within the Bar there is a depth of 15 feet.

Wicklow has a small harbour formed by two breakwaters but is exposed to NW winds. It has a depth of 5 feet to 9 feet. Having entered between the North and East Piers, the best berth is just at the river junction with the harbour on the West side. Let go anchor and then run a line ashore from the stern.

Spring tides rise 9 feet, Neaps rise $6\frac{1}{2}$ feet. For time of high water subtract 20 minutes from H.W.D.

Kingstown (Dun Laoghaire). This immense harbour, whilst having depths of $2\frac{1}{2}$ to 4 fathoms, is exposed to NE

winds and has bad holding ground. In spite of the granite breakwaters Kingstown is better suited for sheltering large vessels, but the smallest craft can bring up between the landward end of the East Pier and the Mail Boat Pier. The holding ground at the western part of the harbour is especially bad, and easterly gales render that area unsafe. It is advisable to carry plenty of way if sailing in between the piers, and then anchor where directed, but moorings are sometimes available.

Repairs can be made to hull and engine. Provisions, fresh water, and motor fuel available. Spring tides rise 11 feet 8 inches. Neaps rise 9 feet 10 inches. For time of high water add 22 minutes to H.W.D.

Howth Harbour gives perfect shelter. There are deep water berths along the piers, but the best place to bring up is abreast of the Customs House in 8 feet, and run a stern rope to a red warping buoy immediately to the SW. Otherwise lie alongside the East Pier in 9 feet. Spring tides rise 13 feet, Neaps rise 10 feet. For time of high water add 20 minutes to H.W.D.

Drogheda. The River Boyne has 5 feet on the Bar and about the same, or a foot more, within. The entrance is a cable wide and marked by buoys, stone beacons, and perches. Keep in mid-channel. The two beacons (showing fixed lights) on the shore at the South side of the entrance when kept in line East and West, lead over the Bar. The best time to enter is during the last hour of the flood. Drogheda lies some 4 miles up the river, with at least 8 feet of water alongside the quays. A yacht could anchor just above Crook Point, where the Boyne curves to the West.

Spring tides rise 11 feet 10 inches. Neaps rise 9 feet. For time of high water add 12 minutes to H.W.D.

Lough Carlingford. The approach from seaward is towards low-lying land, and is difficult at low tide, being encumbered with shoals. The entrance must not be attempted during onshore gales. Having sighted the bell (light) buoy to the SE of Cranfield Point, make for the entrance on a NW $\frac{1}{2}$ W course with the two leading lights in line. Enter via the New Cut (which has a 2 $\frac{1}{2}$ -knot-tide at Springs, and 1 $\frac{1}{2}$ knots at Neaps), keeping within the well-buoyed channel, leaving black can (uneven) buoys to port ; red conical (even numbered) buoys to starboard. After Haulbowline the channel turns more westerly. Steer NW by West for Greenore, which is the harbour for the L.M. & S. Railway steamers. Do not stop here, but anchor 3 cables WNW of Sheep Rock in 5 fathoms out of the tide, with good holding ground. There is also excellent anchorage in Rostrevor Bay at the NE corner in 1 $\frac{1}{4}$ fathoms. This is a snug berth for all winds.

At Cranfield Point Spring tides rise 15 feet, Neaps rise 12 feet. For time of high water add 10 minutes to H.W.D. Pilots come out in motor boats and can be picked up off the fairway whistle buoy.

Kilkeel Harbour, 3 $\frac{1}{2}$ miles NE of Cranfield Point, is not to be despised in an emergency, provided you do not draw too much water. At half tide you can expect 5 feet. Enter between the two piers on a NW course and go into the dock to starboard, or else into the new one right ahead which has a drawbridge. But both docks dry out at Spring tides. In fine weather anchor off the shore.

Tides as at Cranfield Point. (See under Lough Carlingford above.)

The harbours **Annalong, Dundrum, and Killough**, all dry out and are not recommended.

Ardglass Harbour is usually crowded during the herring season, and at high water during an onshore gale there is a certain amount of swell. On the other hand this makes a most convenient stopping place for the night ordinarily. It has a fixed white light on the inner pier to lead into the channel, there are depths of 8 to 16 feet in the Outer Harbour which can be entered at all times, and the red sector gives warning that you are out of the channel. When coming in, leave the red iron tripod (marking the rocks on the East side) to starboard, and the outer end of the pier to port. Anchor North of the first (i.e. the easternmost) angle of the pier and between that angle and some rocks.

Tides are practically identical with those at Kilkeel Harbour.

Lough Strangford. In approaching from the South, having passed Gun's Island, which has an obelisk-shaped beacon at its southern end, you sight St. Patrick's Rocks off Killard Point and marked by a black perch. These rocks cover at 4 hours flood. Off the entrance to Lough Strangford is moored a red-and-white horizontal-striped whistle buoy, which also has a flashing light. In southerly winds a heavy sea breaks on the Bar, and there is a line of overfalls NE of Killard Point when the ebb pours out of the lough. Much of this tide-rip can be avoided by keeping over to the SW.

The entrance to the lough is divided into two channels by the Angus Rock which carries a beacon. Strangers should pass by the East and not the West channel. Keep clear of Bar Pladdy to starboard : it is marked by a red conical buoy. The tide through this East channel runs at $4\frac{1}{2}$ knots, and beware of the Meadows rocks with overfalls just North of the Angus Rock. Even when the flood is just making there are sinister whirlpools and eddies, which must be avoided.

The West channel is too tricky for those not accustomed to the lough. The velocity of the tide is surprising, and just

before reaching Strangford Harbour which is on the port hand it attains a rate of nearly 8 knots. Portaferry, on the other side, is a pretty village where vessels not exceeding 8 feet draught can lie NW of the quay during fine weather, though they will feel the strong tide.

If the wind is southerly, anchor behind Swan Island or in Audley Roads. The latter are in a bay surrounded by charming park-like land, affording perfect shelter in quite slack water.

At Strangford Quay Spring tides rise 11 feet 10 inches. Neaps rise 10 feet. For time of high water add 50 minutes to H.W.D.

The best time to enter Lough Strangford is at slack water, for at times the tide in the Narrows reaches a velocity of 6 knots.

Donaghadee is a small but safe harbour, yet open to NE winds which send in a nasty swell. Formed by two piers, which blanket a craft sailing in through the entrance which is 50 yards wide, Donaghadee is of special convenience to cruisers who wish to avoid the anchorages in Belfast Lough. Beware of the tide which sets across the mouth, turn sharp to port on entering, and let go anchor in 9 feet at the SE side of the harbour. There will usually be a boatman ready to run out a stern warp to the wall by the steps. Whilst hereabouts you can lie afloat ; the SW part of the harbour dries out.

Spring tides rise 12 feet 10 inches. Neaps rise 11 feet. For time of high water add 5 minutes to H.W.D.

Belfast Lough. The entrance to this wide arm presents no difficulty when approaching from the North, where Black Head with its high land and white lighthouse (148 feet high) is an excellent mark when coming in from the sea. In arriving from the South from Foreland Point beware of the Briggs rocks.

(1) Bangor Harbour is formed by piers, and yachts drawing not more than $4\frac{1}{2}$ feet may lie afloat, but they are exposed to northerly winds. This anchorage should be avoided except temporarily in fine settled weather, and not even then if the breeze comes North.

(2) At Cultra there is a better anchorage in offshore winds, half a mile abreast of the Royal North of Ireland Yacht clubhouse, which is a long building having a flagstaff. This berth, however, is exposed to winds from NW through North to East.

(3) Carrickfergus Harbour, on the North side of Belfast Lough, dries out, but there is anchorage about 200 yards SSE of the East Pier in 2 fathoms, giving shelter against winds from WNW to NE.

(4) If really bad weather threatens, especially from East, the only possibility is to run right up to Belfast through a well-buoyed channel, leaving black can buoys to port and red conical to starboard, enter Spencer Basin, passing between the piers, and there find security.

At Belfast Spring tides rise 11 feet. Neaps rise 9 feet 9 inches. For time of high water subtract 15 minutes from H.W.D.

Larne is an excellent harbour and easy of access, with plenty of water for yachts, but the lough has a tide of $3\frac{1}{2}$ knots at Springs. Anchor abreast of the moss-covered rock on the East shore above the jetty, and known as the "Yellow Stone." Here you will get from $3\frac{1}{2}$ to 4 fathoms in good holding ground and not much tide.

The entrance lies between Farres Point and Sandy Point, each of which has a lighthouse. The channel is narrow and the red conical Spit light buoy off Sandy Point will be left to starboard. The leading marks are two pillars on the railway wharf, which in line bear $SW\frac{3}{4}S$ and at night carry each a fixed red light.

Spring tides rise 8 feet 8 inches. Neaps rise 8 feet 3 inches. For time of high water subtract 3 minutes from H.W.D.

Provisions, oil fuel, and repairs procurable.

Carnlough Bay provides a useful anchorage for a tide so long as the wind is from NW through West to SW, but when it comes NE the berth is impossible. There is, however, a convenient little harbour of the same name which has 8 feet within at low water, and 6 feet over the Bar, but the entrance is exposed to the SE. Motor in and secure, as there is no room to manœuvre. Spring tides rise only 5 feet 3 inches, and Neaps 5 feet. For time of high water add 25 minutes to H.W.D.

Red Bay, a little to the North likewise is a good temporary anchorage in westerly winds, but unsuitable when it blows from East or NE. Even SW winds come down the valleys in heavy squalls. There is a good spot to bring up, out of the tide, just South of the pier where a certain amount of shelter exists. At Springs the tide rises 6 feet 3 inches, and Neaps $5\frac{1}{2}$ feet. For time of high water subtract 4 minutes from H.W.D.

Rathlin Sound. Between Fair Head and the Bloody Foreland, this North coast of Ireland with its gaunt wild cliffs is at the mercy of the ruthless Atlantic. There are strong tides, dangerous overfalls, and heavy seas; consequently only well-found, wholesome craft should cruise in this area. Snug harbours are few, bad weather with rain and mist, frequently characterizes the environment. August is usually a wet month, but June and July are the best periods for cruising. The prevailing winds are SW and W, which kick up considerable commotion when opposed to the races off the headlands, or in such Sounds as Inishtrahull and Rathlin.

There is a race off Tor Head, and the eastern end of Rathlin Sound with its dangerous overfalls, and 6-knot Spring tides must be negotiated at the proper time. If possible choose the period of Neaps and slack water : to this intent the departure (if bound North and West) can be made from Red Bay, Carnlough, or Larne at the right hour. There is no other good anchorage until Lough Foyle, with the conditional exception of Portrush (see below). Giant's Causeway is bold and impressive to look upon, but in keeping with a cruel rock-girt stretch of coast.

Beware of the strong eddies in Rathlin Sound, and avoid them by looking out for their edges. If overtaken by heavy weather, run back to Carnlough or Larne.

In the North channel between the Mull of Cantyre and Fair Head the tide floods to the South at 4 knots, and an ugly sea soon gets up. During the War German submarines availed themselves of this tide when entering the Irish Sea, being able to stop engines for a while and thus preserve secrecy from the listening hydrophones.

Portrush is a very small artificial harbour, with a least depth of 7 feet. Let go anchor and run out a warp to the quay. Do not run in until the entrance is seen well open. It is well to arrive under power as there is little enough room for manœuvring. Do not make for this harbour in NW gales which render it dangerous, and a heavy scend comes in. Spring tides rise 6 feet, Neaps rise 3 feet 10 inches. For time of high water subtract 4 hours 38 minutes from H.W.D.

N.B. It is better to pass outside the Skerries.

Lough Foyle, apart from being a convenient stopping place, is not likely to attract the cruising man, and cannot be entered against the tide except with a strong wind or under power. There are two channels for this lough :

(1) The North is half a mile wide and is the principal, with depths of 6 to 10 fathoms for about half way up until the fairway becomes restricted, and shoals before again deepening. Off the entrance to the lough is a black-and-white horizontal-striped whistle, light, buoy; the North channel being situated between Inishowen Head and a black can light buoy on the East side which keeps you off the Tuns Bank. A course West by $S\frac{1}{4}S$ leads to abreast of Macgilligan Point. If waiting for the tide anchor off Macgilligan Strand. The leading marks will be easily recognized. (2) The South channel is narrow and has $3\frac{1}{2}$ fathoms, and will be found preferable if the wind be SW or W. Leave to starboard all red conical buoys and red beacons: leave to port all black can buoys and black beacons. The stream attains a velocity of 3 knots. Channels excellently marked.

Keep clear of the North middle bank off Moville Pier. There is anchorage off here but the tide is strong and with any wind the berth is not pleasant. Run out a kedge.

Another anchorage is in the pool below Londonderry South of the leading lights; or better still in $1\frac{1}{2}$ fathoms just below the bridge. A yacht could be laid ashore and scrubbed at St. Columb's Ferry Pier, opposite the Guildhall, if drawing not more than 8 feet.

Spring tides at Londonderry rise 7 feet 8 inches. Neaps rise 5 feet 7 inches. For time of high water subtract 2 hours 30 minutes from H.W.D.

Lough Swilly. When proceeding from Lough Foyle to Lough Swilly it is well to have a foul tide from Inishowen Head till past Culdaff Bay, in order that a fair tide may be carried round the rugged Main Head, where the stream is very strong and the seas are troublesome. This is considered by some to be a worse place than Rathlin Sound, although the velocity of Inishtrahull Sound is only 3 knots. Even at the best of times there is generally a heavy Atlantic

roll, and in bad weather it is positively dangerous for yachts. The tide round Malin Head runs West only for 3 hours, but runs SE for $7\frac{1}{2}$ hours. The best time to leave Moville in Lough Foyle is 1 hour after local high water, taking the ebb down to the mouth and reaching Culdaff Bay just as the West-going tide begins.

With SW winds Culdaff Bay is apt to be gusty but this roadstead is of great convenience, when the wind is off the land, for waiting till the tide makes. There is no anchorage under Inishtrahull Island. After passing the barren Garvan Isles, which are to be avoided altogether in all but the finest weather, and rounding Malin Head, make for the noble Dunaff Head. Between the latter to the East and Fanad Head on the West (distinguished by a white lighthouse 127 feet high), is the 3-mile-wide entrance to Lough Swilly which is 26 miles long and has water enough for any vessel. It is easy of navigation, but avoid the Swilly Rocks on the West, keep in the middle and make for Dunree Head, which also has a tall lighthouse. Thence keep West of a line joining Dunree Head and Buncrana lightpost (near the pierhead on the East side of the lough), passing black can buoys to port.

Having passed Buncrana, work the West shore, and big yachts can anchor above Rathmullan in 4 fathoms, but for small craft when wind is against tide this berth is too exposed even when brought up close to the shore. Small craft should not anchor off Buncrana, except temporarily in fine weather. A good anchorage is further up, SW of Inch Island, in 3 fathoms, but the best of all is in Fahan Creek, where will be found good shelter in $1\frac{1}{2}$ fathoms. A yacht drawing 9 feet can enter Fahan Creek at all times except when a ground swell comes up the lough. Otherwise enter at dead low water, to learn the banks, leaving the Inch Spit black can buoy on the East side to port, and the red conical buoys on the West side to starboard.

Off Portsalon, where is an hotel, there is a good anchorage

in SW winds but this bay is not so quiet as Fahan Creek. At Rathmullan both water and provisions can be obtained, and there is also an hotel. There are plenty of facilities in the Lough Swilly area for salmon fishing, wildfowl and golf, with excellent space for boat-sailing.

Spring tides rise 13 feet 3 inches. Neaps rise 9 feet 9 inches. For time of high water subtract 5 hours from H.W.D.

Mulroy Bay lies 5 miles West of Fanad Head. Coming from the East, give the coast between Lough Swilly and the entrance to Mulroy a wide berth so as to keep clear of all rocks. Make for Melmore Head, which is steep-to. About 4 miles North of the latter is a red conical whistle buoy to mark the Limeburner Rock. Keep close to Ravedy Island, at the North end of which is an unwatched light, and then pick up the two unwatched lights at the East side of the lough on Faigham Hill. These kept in line lead S½W and clear Lenan Rock. It should be mentioned that the full force of the Atlantic exerts itself at the entrance of Mulroy and the Bar should not be crossed if the sea is breaking, though in fine weather it is safe to enter after half flood. If stopping only for a short visit, anchor in Port Na Ling under Ballyhooriskey Island which is on the East side of Mulroy entrance. Here you will get 2 fathoms, and whilst only 1 mile from the open sea it will be found quite sheltered from the swell together with SW or West winds.. At low water with head wind, enter under power.

Mulroy is a remarkable arm of the sea providing fifteen miles of inland sailing, for the upper part of which local knowledge is requisite. It contains numerous bays and islands which would need weeks for complete exploration. There exist, respectively, the First, Second, and Third Narrows, after which the Broad Water is reached. Perches have been erected on various rocks, but even with this aid

a stranger should not risk his ship too far up without a pilot since some of the rocks are only slightly submerged. There is absolute security at the southern extremity of Broad Water, but between the First and Second Narrows there is an excellent and well protected berth in Fanny's Bay. It is from here that the necessity for great caution is requisite. When passing through the First Narrows, keep in mid-channel. A local fisherman should be obtained for pilotage above Fanny's Bay.

At Mulroy Bar Spring tides rise 11 feet 10 inches. Neaps rise 8 feet 6 inches. For time of high water subtract 5 hours from H.W.D.

Sheephaven contains no safe anchorage and should be avoided.

Aran Island (Donegal). When cruising between Lough Swilly and Donegal a good anchorage for the night can be found on the East side of Aran Island in Aran Road, protected against winds from SW to NW.

Killybegs Harbour is an excellent anchorage which gives perfect protection in all weathers, and is easy of entrance. There is plenty of depth with a selection of berths, but a suitable one will be found off the pier. Spring tides rise 11 feet 3 inches. Neaps rise 8 feet 6 inches. Inver Bay is too exposed for small craft.

NOTE. The West coast of Ireland is characterized by bold rocks, precipices, majestic mountains, numerous inlets, natural harbours. But this part of the world demands a sound wholesome craft well-found in every respect. Hard winds must be expected frequently, and there is usually a heavy swell which soon is whipped into a wicked sea, but especially is this true off the headlands. The barometer off

this coast is not so useful as elsewhere, for gales have a habit of coming on before the glass has had time to give notice ; but bad weather is generally foretold by an ominous swell dashing itself against the rocks. It is, therefore, advisable for small craft to make short passages and have a convenient harbour in mind if it becomes necessary to run for shelter. Supplies are in many places unobtainable, so the ship should be kept well stocked at every opportunity. This particularly applies to meat and oil fuel. The most suitable period of the year for a West Irish cruise is in June, July or August. September can be very wild. At the best of times the colouring and grandeur of the scenery are very impressive : at the worst it is a region of raw nature, with mists, seabirds, and gales either impending or expending. Heavy gusts must be expected under the land. There is considerable rain, but there is not much cold. Beware of the indraught into all bays, and of an uncertain set of tide if making a long run in thick weather. Small yachts will find an auxiliary motor of great convenience, not merely for negotiating the many narrow rock-strewn entrances, but during those periods of calm when the Atlantic swell knocks all way off a sailing vessel. Some useful short cuts through narrow channels are practicable only under power.

Donegal Bay. Mullaghmore has a harbour which dries out at low water Springs. The roadstead has a heavy ground swell in westerly winds.

Donegal Harbour. Within Doorin Point there should be a black can buoy where the fairway becomes about 200 yards wide, but there is always plenty of water. Keep quite close to this buoy and avoid the hard sand of Murvagh Spit. Steer NNE from this buoy till up to the rocks on the port hand, when steer East by North and hug the mainland shore to Salthill Quay. Thence proceed ESE to the Hassans,

but alter course to NE when off Green Island, and anchor off the East side of Green Island in 2 fathoms low water Springs. There is here perfect shelter. It should, however, be added that under certain conditions of light it is not easy to identify the islands. Moreover the buoy may be missing. Dairy produce can be obtained locally ; meat and other provisions from Donegal about a couple of miles further NE up the channel. There are excellent sands for bathing, and this is a good locality for dinghy sailing. The ebb and flood are irregular, being affected by wind and rain. Beware of powerful squalls from the hills. The barometer is not to be relied upon entirely, as depressions come quickly. (The fixed white light at St. John's Point lighthouse is now an unwatched white occulting light.) At Donegal Harbour Spring tides rise $11\frac{1}{2}$ feet. Neaps rise $8\frac{1}{2}$ feet. For time of high water subtract $5\frac{1}{2}$ hours from H.W.D. Below Donegal there is very little water for the first two miles, and at the quay it practically dries, but the latter could be approached soon after half tide by a craft drawing $4\frac{1}{2}$ feet.

Ballyshannon Harbour has a Bar with 4 feet, but at the quays there are several fathoms of water, where a yacht could berth. (Tides as at Donegal.)

Blacksod Bay is about 2 miles wide at the entrance, and here small craft on passage can obtain shelter, with an easy approach. Either of the following anchorages can be used : (1) Bring up in Bull's Mouth, which can be entered at low water. There is plenty of depth. Go well up, use the lead, and lie in security. (2) To anchor in Elly Bay, round Blacksod Point (which has a white building with unwatched light), pass Blacksod Bight and go further up on the port hand. Elly Bay gives an excellent berth with good holding ground in 1 to 3 fathoms. Spring tides rise 10 feet 5 inches. Neaps rise 7 feet 8 inches.

Time of high water as at Donegal.

Clew Bay. Make for Inishgort lighthouse, which is white at the entrance to Westport Harbour and will be seen for some distance. Leave the latter to port and the black conical Dorinish Bar buoy, at the southward, to starboard. Bring up in Inishlyre Harbour protected by islets. It is nearly 5 miles to Westport, whence there is a railway to Dublin and other parts of Ireland. At sufficient rise of tide Westport quay can be reached, and a vessel of 6 feet draught could attempt it at half flood. Spring tides rise 14 feet 4 inches. Neaps rise 11 feet. For time of high water subtract 5 hours 40 minutes from H.W.D. There is a white lighthouse at the North extremity of Clare Island. To the SW lies Inishbofin, where temporary anchorage can be found in Rusheen Bay.

Killary Bay to the east of Inishbofin is a most useful anchorage. Whilst this inlet is narrow, it is easy to enter under power, is deep, and situated between beautiful mountains. The tides at the entrance are weak, and you may go up as far as convenient, but there is over a fathom's depth at the head, some eight miles from the sea. This is a very snug anchorage except that the mountains create violent squalls, and for this reason it is better for a stranger to stow canvas and come in with the auxiliary engine. Spring tides rise $12\frac{1}{2}$ feet. Neaps rise $9\frac{1}{2}$ feet. For time of high water add 6 hours to H.W.D.

Ballynakill Harbour gives good protection, but a reliable chart is needed because of the rocks and islands at its approach. A suitable anchorage may be selected near to Ross Point. Tides as at Killary Bay. **Clifden Bay** has a good anchorage off the Castle. **Roundstone Bay** gives excellent shelter, but the square red lighthouse on the SE side of Deer Island is low and hard to identify by daylight. **Cashla Bay** and **Casheen Bay**, both on the North side of the Galway

coast opposite to Arran Island, contain good anchorages sheltered from wind and sea. The light at the West side of Cashla Bay is not to be relied upon.

Galway Harbour lies at the NE end of Galway Bay. Whilst being somewhat off the cruiser's track when circumnavigating Ireland, this is a convenient place for obtaining provisions, motor fuel, and engine repairs. The roadstead means a long row to the shore. Entrance to the harbour is over a Bar which has only 4 feet, but the fairway is marked on the West side by a black can buoy and on the East side by a red conical buoy having staff and globe. It is well, if staying any time, to signal for a pilot who will row off to the roadstead and take the craft at high water into the New Dock. Green lights lead into the dock when the gates are open. Red lights indicate that the gates are shut. Within you lie afloat. Between Nimmo Pier and the docks are emptied into the sea the waters from Lough Corrib. Yachts drawing not more than 6 feet might have an interesting time proceeding into the latter and exploring this 23-mile-long lake, with its islets. Spring tides rise 15 feet 8 inches. Neaps rise 8 feet. For time of high water add 6 hours to H.W.D.

River Shannon is not likely to tempt yachtsmen. The entrance is about 8 miles wide, and a nasty sea may be expected off Loop Head. If anchorage be sought within the Shannon, Kilrush dries out, but a yacht can go alongside the quay at high water or else anchor East of Scatterry Island. Or she can go further up to Foynes on the opposite shore and bring up East of the village in good holding ground. At Kilrush Spring tides rise 14 feet. Neaps rise 10½ feet. For time of high water subtract 6 hours from H.W.D.

Tralee Bay. If overtaken by bad weather off Kerry Head, run into Tralee Bay. There is anchorage at its

southern end, also NE of Fenit Pier. It will be recollected that in April 1916, this was the bay chosen for the intended landing of arms from the German s.s. *Aud* on the eve of the Irish rebellion. For a time the *Aud* cruised about off Fenit Pier, but next day was arrested by H.M. Ships. The German submarine U-22, however, landed Sir Roger Casement in a collapsible boat on the beach to the North of Fenit.

Spring tides rise $13\frac{1}{2}$ feet. Neaps rise 10 feet 4 inches. For time of high water add 5 hours 20 minutes to H.W.D.

Dingle Bay. In approaching this inlet there is often to be experienced a confused sea with heavy swell both off Sybil Head and the Blaskets, where the tides are strong. Nevertheless from these impressive islands one still sees the inhabitants making the crossing in their home-manufactured skin boats. In SW gales this is a most boisterous locality. Within the bay on the North side are the two harbours of Dingle and Ventry. The former is not of much avail, and has a very restricted area in which to keep afloat. Anchor just inside the entrance. Ventry is a moderately safe and fairly comfortable anchorage ; but is exposed to SE gales as also to a westerly swell. It is suitable for stopping a night.

Valencia Harbour, which is on the southern shore of Dingle Bay, provides excellent shelter in all weathers. This will be found a useful stopping place between Galway and Bantry Bay. Valencia being an island, there are two entrances, neither of which is difficult, but each requires normal care and regard for the weather.

(1) Northern Entrance. This is the most used. The course is SSE, steering thus with the two lights in line : by day these marks consist of beacons, the front being white and the rear being black-and-white. Next turn to port and you will find yourself already in the harbour. The best anchorage for small craft is further on, i.e. past the gravel

spit known as The Foot, and to the SE of Knightstown where you can bring up in about 2 fathoms, on the West side, being well protected for all winds and sea. Be careful to give The Foot red cask buoy a good berth. The spit here extends further than would be expected, and has already been the cause of at least one fine vessel's loss. At Knightstown a number of supplies can be obtained, and excellent drinking water from a well.

(2) In bad westerly weather, if bound South, a small craft need not go out by the above entrance, but can avoid the heavy seas by continuing inside the island of Valencia. Whilst a pilot would be superfluous, caution is requisite together with a large-scale chart and plenty of tide. The scenery is rather depressing, but there is good anchorage off the hamlet of Port Magee, which is on the mainland, only a short distance from the southern entrance. Off Bray Head beware of squalls and big seas if there is any wind about. Port Magee is well sheltered in all weathers, but if it is blowing a SW gale it is better to enter by the Northern Entrance. With the wind blowing fresh from NW the Southern Entrance is convenient. Spring tides at Knightstown rise 11 feet 9 inches. Neaps rise 9 feet. For time of high water add 5 hours 12 minutes to H.W.D.

Ballinskelligs Bay may be found a useful anchorage temporarily if overtaken by fog, or the wind dies down at the end of a fine day, when any breeze would come northerly. Even then a certain amount of swell will probably be felt. In southerly winds this bay becomes an unpleasant and even risky berth. The transatlantic cable departs from here.

Kenmare River is a long arm of gaunt and gorgeous scenery with rare colouring but generally rocky, inhospitable shores, and only few anchorages, against a mountainous background. It is advisable to have plenty of supplies on

board as it is almost impossible to get anything ashore, and one might be held up by severe westerly weather for days. This fjord is 7 miles wide at its mouth, where there is usually a bold swell from the Atlantic, and craft of 6 feet draught can approach within 4 miles of Kenmare. In an emergency and by walking for an hour, provisions could be obtained from Kenmare, a distance of 30 miles from the ocean.

The four following anchorages are available, Darrynane Harbour being intentionally omitted as suitable only for local fishermen.

Ballycrovane Harbour is on the south side of Kenmare River and is small ; but you can bring up in 4 fathoms, mud, with good holding. Enter with caution. Until the end of the War there used to be a Coastguard Station here. It is in a wild locality, and the berth should be regarded as only temporary. Lobsters may be obtained.

Ardgroom Harbour is another natural harbour on the South shore and gives excellent anchorage, being practically landlocked, with several fathoms of water. But great caution is needed by a stranger. A plan is shown in Admiralty Chart No. 2495. The rocky Bar has $1\frac{1}{2}$ fathoms. To enter, steer E by S with two white marks (on the SE side of Ardgroom) in line, and this will take you safely over the Bar.

Kilmakilloge Harbour, also on the South side, but further East, affords perfect shelter and is easy of access. There is a plan in Admiralty Chart No. 2495. Anchor in the western arm known as Collorus Harbour ; or else in the SE corner of Kilmakilloge.

Sneem Harbour on the North side of Kenmare River is small and not altogether free from SW swell, but in ordinary weather it is quite a good berth. The entrance is easy. Pick up the conspicuous, large, Parknasilla Hotel which will

lead up harbour on a NE by $N\frac{1}{2}N$ bearing. Then anchor on the West side in $1\frac{1}{2}$ fathoms. There is a plan in Admiralty Chart No. 2495. In summer-time it is pleasant to land and walk amid the wild irises to Sneem, where supplies can be obtained, or to Parknasilla where hot baths and a meal are procurable.

Spring tides rise about 11 feet. Neaps rise about $8\frac{1}{2}$ feet. For time of high water add $5\frac{1}{4}$ hours to H.W.D.

NOTE. When leaving or approaching Kenmare River there are two routes : (1) The big ship way is outside the Bull, Cow, and Calf Rocks, where on the smoothest days there is ever a big swell. If the wind is at all fresh, there is a very ugly sea. On the top of the Bull is an important lighthouse 270 feet high, and below is a curious natural tunnel through which more than one adventurous person has risked a passage in a dinghy. (2) Small vessels with engine power will find that in bad weather it is a saving not merely of distance but of anxiety to use Dursey Sound. The channel certainly is narrow, and there is one submerged rock, which can be passed on its western side. The tide is strong. But, otherwise, this useful Sound presents no difficulties to a yacht with auxiliary power.

Berehaven (erroneously spelled on some charts Bear Haven) is a long fjord formed by the protection of Bere Island at the South. There are two entrances, East and West, though the former is most commonly used, being $\frac{3}{4}$ mile in width. The western entrance, however, has water enough for the deepest yachts. It is somewhat narrow and in SW winds there is usually a big sea at the mouth. Nevertheless it is quite safe for a sailing yacht running in with a fair wind. At Springs there is a 2-knot tide.

The eastern entrance is very easy to make except in the thick weather, which is by no means unusual. It is then advisable to steer a compass course between the East end

of Bere Island and Roancarrig to reach the North shore under Hungry Hill, where the land will be sighted. At the height of summer Berehaven is exceptionally beautiful with a rare grandeur. Hungry Hill (2181 feet high), bare and sometimes mist-topped, is a conspicuous landmark. The haven is set against a background of mountains, waterfalls, yellow and black rocks, gorse, turquoise sea, deep ravines, green slopes, and dark shadowed glens. The tide is weak, there is plenty of room for a vessel beating in, and the channel is wide. If stopping temporarily, let go off Laurence Cove during southerly winds, but avoid going too far in because of the shoals. During northerly winds there is excellent anchorage in Mill Cove further West on the North shore.

When really bad weather threatens, it is better to go round the West side of Dinish Island and enter Castletown Harbour in 1 to $1\frac{1}{2}$ fathoms. The entrance channel out of Berehaven is here narrow, and vessels of 5 feet draught should exercise caution at low water Springs. But this anchorage is perfectly safe, though the heaviest winter gales are here felt. Eggs, milk, and butter can be obtained from the cottages along the North shore. Castletown boasts of an hotel, post office, and provides some supplies : but it is a dull village, dirty and dreary. In the surrounding country there are some magnificent walks, and the bathing is excellent.

Spring tides rise $10\frac{1}{2}$ feet. Neaps rise about 8 feet. For time of high water add $5\frac{1}{2}$ hours to H.W.D.

Adrigole Harbour, $1\frac{1}{2}$ miles East of Roancarrigmore Lighthouse, is suitable for yachts up to 9 feet draught and can be recommended to those on passage who wish to avoid Berehaven. Adrigole is quite easy of entrance and very sheltered. Turn to starboard after coming in, avoid the southern extension of rocks from Orthon Island, and anchor on the latter's East side in 3 fathoms. The scenery is remarkable. The holding ground is moderately good.

Glengariff Harbour at the NW head of Bantry Bay is perhaps the most beautiful anchorage in all Ireland. This landlocked natural harbour, with its blue water, picturesque islets, luxuriant vegetation, fir-trees, rocks, soft colouring, and mountainous background, is perfectly sheltered even in the worst winter gales, yet after a fall of snow the entrance is difficult of discernment even to those well acquainted. On moonless nights it is not easy to enter or leave. The holding ground is indifferent, and if there is any wind after sunset one should let go a second anchor, but a yacht will ride head to wind. It is no rare occurrence for craft to drag badly during the night.

The entrance to Glengariff Harbour is on the East side of Garinish Island. From Corrid Point approach on a NE course and avoid the outlying rocks. Especially give a wide berth to the Ship Rocks. It is better here for a stranger to go rather towards the East shore before altering course to the NNW.

Anchor anywhere in the middle of the harbour in 4 fathoms, and let go plenty of cable. During the heaviest winds a yacht will find the snuggest berth just South of Sherkin Island, and convenient for the shore, in $1\frac{1}{2}$ fathoms; or to the East of Bark Island. Here it is handy for landing on the East side and walking up through beautiful surroundings to Roche's Hotel. There is another hotel at the North side of the harbour, past which the village may be reached where provisions, water, and oil fuel may be obtained. This is a good base from which to visit the Killarney Lakes, driving overland by motor. A small steamer runs occasionally between Glengariff and Bantry.

Bantry Harbour is an anchorage at the East side of Whiddy Island, being quite safe in all weathers. Entrance is gained either North or South of the island. The latter is slightly shorter. If coming from the North, keep over to

the East side, leaving Horse Island and Chapel Island to starboard. Bring up W by N of Bantry Pier in about 4 fathoms. Land at the pier. All provisions and motor fuel obtainable at Bantry.

Spring tides rise about 12 feet. Neaps 9 feet 8 inches.

Dunmanus Bay. The entrance lies between Three Castles Head and Sheep's Head, the width being $3\frac{1}{2}$ miles. Each of these headlands is bold, and the Atlantic beats itself violently against them both in bad weather and as a warning of an oncoming gale. If caught in heavy weather from the SW off this coast and there is enough daylight, it is better to run up Bantry Bay into Glengariff. But should there be too little time, make for Dunmanus Bay. The entrance being so wide, presents no difficulties, and the water is deep. Hug the North shore after giving the head a good wide berth to avoid the rebound of the seas. If dusk overtakes you, feel your way into Kitchen Cove on the North side, which can be recommended in all but the worst SW gales. Enter cautiously because of the rocks and get well inside. Should it be too dark for entering Kitchen Cove, let go on the lee side of Carberry Island, having left it to starboard. The loom of that island can generally be discerned even on a moonless night. But the best anchorage of all is right at the NE extremity of Dunmanus Bay, 12 miles from Sheep's Head, in a well sheltered cove known as Dunbeacon Harbour. There is plenty of water for vessels drawing 10 feet, and the holding ground is good. Although the strength of wind will be felt, no sea can here reach you. Stores are unobtainable, except of a simple nature at Dunmanus village.

Spring tides rise $10\frac{1}{2}$ feet. Neaps rise $5\frac{1}{2}$ feet.

Mizzen Head. It should be noted that there is no light shown from here, but a fog signal only. It may further be

mentioned that this explosive gives 2 reports every $7\frac{1}{2}$ minutes. The Old Head of Kinsale also has an explosive fog signal which gives 2 reports every 6 minutes. Although these two headlands are some miles apart, this similarity of warning in thick weather should be noted when making the coast during a period of thick weather ; for on one occasion the sailing ship *Terpsichore*, in approaching the coast of Ireland during a May fog some years ago when the visibility was not more than 300 yards, and not knowing her exact position, heard the two explosions. Her Captain accordingly assumed he was off the Old Head of Kinsale and carried on. Actually he was only well to the southward of Mizzen Head, and after a while was amazed to find his ship aground in Roaringwater Bay surrounded on all sides by the sharp reefs of the Carthy Islands, from which he was eventually extricated miraculously. The Fastnet Lighthouse explosive fog signal gives a report every 4 minutes. Mizzen Head has a 4-knot tide and a race that can be alarming to small craft with the wind onshore. Except in fine weather and at slack water, it is better to round this head at a wide berth. The tide off here goes North from $4\frac{1}{2}$ hours before to $1\frac{1}{2}$ hours after H.W.D. It runs South from $1\frac{1}{2}$ hours after to $4\frac{1}{2}$ hours before H.W.D.

NOTE. Irish explosive fog signals may be suspended at any time.

Barley Cove, close to Mizzen Head, though tempting, should not be used as an anchorage. It is too exposed.

Crookhaven is of great convenience for small craft bound North waiting to round Mizzen Head, or bound SE past the Fastnet. Brow Head, East of Barley Cove, once an important Naval signal station, will be recognized by its high land. There is no difficulty in entering Crookhaven at any state of the tide. Give the Alderman Rocks on the

port hand a wide berth, off which SW winds make a rough sea. Leave the lighthouse to starboard, keep in mid-channel and go well up past the western end of Rock Island, then use the lead, and bring up as convenient in 2 fathoms though not too near the SW shore. It should be stressed that the holding ground is treacherous. Although the shelter is good, yet during heavy squalls the best of anchors will suddenly drag. At night with such weather it is advisable to keep an anchor watch as the rocks are too close and the mud too soft.

Spring tides rise 10 feet 9 inches. Neaps rise 9 feet. For time of high water add $5\frac{1}{2}$ hours to H.W.D.

There is a miserable hamlet ashore, where supplies are practically unobtainable.

Skull Harbour. Long Island Sound together with the other portions of the Roaringwater Bay area provides a wonderful sphere for boat sailing. The entrance to Skull Harbour is perfectly simple, and Bull Rock may be passed either to starboard or port. There is good anchorage at the NW corner off the pier in 4 fathoms, muddy bottom, but a hard SE is the worst wind. Provisions and motor fuel can be obtained ashore.

Spring tides rise 10 feet 9 inches. Neaps rise 9 feet. For time of high water add $5\frac{1}{2}$ hours to H.W.D.

Tides in Long Island Sound are weak, but a large-scale chart is essential.

Cape Clear Island contains two small harbours which are rarely visited by yachtsmen. (1) There is a very snug cove on the North side, which is protected by piers and slightly intricate, but could be used by a 10-tonner in case of emergency. The local fishermen shelter their craft here; and will come out to pilot you in. Otherwise enter slowly. Be ready to moor alongside.

(2) South Harbour on the opposite side of the island will be found less public, but too exposed during southerly winds. It should be used only temporarily.

Gascanane Sound, which separates Cape Clear Island from the mainland, cuts off a corner and is of some convenience when cruising in bad weather, as one is enabled to avoid Cape Clear with its onshore seas. There is a 3-knot-tide at Springs, with eddies, so this Sound should never be used except with a commanding wind or under power.

Baltimore is a suitable stopping place before making a departure either for the English Channel or the West Irish coast. It is quite easy of entrance and recognition except on foggy days. On the western side at Barrack Point is a lighthouse, but give the rocks off there a really wide berth until the harbour is well open. At the East side will be seen a tower on Beacon Point. Proceed straight in, leaving Loo Rock on the East side (marked by a red conical buoy) to starboard. If intending to bring up off the town, steer first towards the Lousy Rocks which are marked by a red perch 15 feet high. Leaving these to port, likewise the Wallis Rock, proceed to the eastward and anchor off the pier in 7 or 8 feet. Vessels of greater draught should anchor on the West side of the harbour off Sherkin Island. This fishing port is very busy early in May. Provisions may be obtained, and there is an excellent little shipyard where repairs of all kinds can be made. Baltimore Harbour gives good shelter in all weathers, and is conveniently near the Fastnet if damaged by the heavy sea off the latter. At the northern exit of this port is a marvellous archipelago well worthy of exploration.

Spring tides rise 10 feet 10 inches. Neaps rise 9 feet. For time of high water add $5\frac{3}{4}$ hours to H.W.D.

Castletownsend is an easy and safe haven into which a light draught vessel can run if caught by bad weather near Galley Head, though in thick weather care is requisite. There is good shelter for vessels up to 10 feet draught, but go well up harbour. There is little tide. Leave the Skiddy Island beacon on the East side of the entrance to starboard and keep in the middle of the channel. Very few supplies obtainable.

Spring tides rise 11 feet. Neaps rise $8\frac{1}{2}$ feet. Time of high water approximates to that of Baltimore.

Glandore Harbour has good shelter for small craft up to 8 feet draught and is visited by fishing vessels. There is little tide. To enter give Adam Island a berth to port and keep close to Eve Island. The Danger Rock is marked by black-and-white horizontal-striped spherical buoy and a perch. Leave these to port. The best anchorage is between Glandore village and Union Hall. Drinking water and some supplies obtainable at Glandore village.

Rise and fall of tide as Castletownsend. High water about 6 minutes later.

Courtmacsherry Harbour, though available for small yachts, has depths which vary from time to time. Southerly winds of any force make this a dangerous harbour, and it cannot be recommended.

Off the Old Head of Kinsale the tide goes East at 2 hours after H.W.D., and West at 4 hours before H.W.D. There is slack water at $4\frac{1}{2}$ hours before H.W.D., and $1\frac{1}{2}$ hours after H.W.D. At Springs the tide runs at $2\frac{1}{2}$ knots. Nominally the race extends for only a mile off the Head, but actually in bad weather there is ugly water for two or three miles. Small craft unable to work the slack tide, should give the Head a berth of at least that distance if there is any sea running.

Kinsale Harbour on the East side of the Head is readily made out. This natural haven is formed by the River Bandon and is protected from all winds and sea. On the East side is Fort Charles, above which the channel is marked on the West side by black can buoys. After turning to port, bring up West of the pier off the town of Kinsale and in mid-stream. There is rather a strong tide, but good holding ground in blue mud. Supplies can be obtained ashore.

Spring tides rise $12\frac{1}{2}$ feet. Neaps rise 9 feet 8 inches. For time of high water add 6 hours to H.W.D.

Oyster Haven, 2 miles East of Kinsale Harbour has an anchorage for small vessels up to 9 feet draught, and is suitable for stopping a night. Bring up just within on the West side. (Tides as at Kinsale.)

Cork Harbour (Cobh). The entry is perfectly simple if the buoys are followed, but the mouth is exposed to the prevailing winds which send in a bad sea. If staying only for a night or two, it is quite unnecessary to go right up to Queenstown. Merely turn to port and anchor off Crosshaven in the River Carrigaline in 2 fathoms. This is a delightful berth, safe, peaceful, and away from big traffic. The channel is well marked by black can buoys and a beacon. If visiting Queenstown itself, it is better to bring up near Rushbrook and walk in to the town. The so-called "yacht anchorage" east of Queenstown is less suitable and exposed for small craft. East Passage is quiet, and provides well protected shelter in 4 to 6 fathoms, but it is a long way from civilization. All provisions and yacht requisites can be obtained at Queenstown and Cork. Royal Cork Yacht Club at Queenstown.

Spring tides at Queenstown rise $9\frac{1}{2}$ feet. Neaps rise 6 feet. For time of high water subtract 5 hours 40 minutes from H.W.D.

Ballycotton Harbour is not recommended.

Youghal Harbour on the River Blackwater has shelter for yachts of any draught. Anchor inside Ferry Point, but a swell is felt when the wind is SW. The fixed red tide-lights ashore are exhibited from 2 hours before to $1\frac{1}{2}$ hours after local high water. It is better to enter by the East channel.

Spring tides rise 12 feet 9 inches. Neaps rise 10 feet 3 inches. For time of high water subtract $5\frac{1}{2}$ hours from H.W.D.

Dungarvan has an anchorage in 2 fathoms in the Pool, which is satisfactory if stopping only a tide, but this berth is exposed to SE winds. Alongside the wharf it dries out.

Spring tides rise 13 feet. Neaps rise 10 feet 10 inches. For time of high water subtract 5 hours 34 minutes from H.W.D.

NOTE. There is no really satisfactory harbour East of Queenstown until Waterford is reached.

Waterford. On the East side of the entrance will be seen Hook Lighthouse, a white tower 152 feet high, with three red bands. Give Hook Head a good berth, and enter between the buoys, leaving red conical to starboard and black can to port. The following anchorages are available :
(1) If stopping only a tide during fine calm weather bring up in Dunmore Bay which is on the West side, but exposed to easterly winds. Clear out if bad weather threatens.
(2) Dunmore Harbour is satisfactory for craft drawing 6 feet, but is also exposed when it blows hard from the East.
(3) For a really comfortable and beautiful anchorage go up Waterford River and let go in 3 fathoms off Ballyhack (Provisions and motor fuel obtainable ashore.) (4) In the River Suir below Waterford.

Spring tides at Dunmore rise 14 feet. Neaps rise 11 feet 5 inches. For time of high water subtract 5 hours 25 minutes.

CHAPTER IX

THE COAST OF SCOTLAND

(FROM THE MULL OF GALLOWAY TO THE ORKNEYS)

THE crossing of the North Channel between Scotland and Ireland demands careful consideration on the part of small craft. Between the Mull of Cantyre and Fair Head the flood sets South at $3\frac{1}{2}$ knots to 4 knots. It is preferable to make the passage from Corsewall Point and then to pick up Black Head at the North side of Belfast Lough, a distance of only 23 miles. The advantage of this route is that there are no dangers, the tides are less fierce, and the high land of Black Head is a convenient landfall. There is bound to be more sea, especially when windy, if proceeding from Campbeltown to Ireland by the shortest route. The prevailing winds are West or SW.

Mull of Galloway. There is a white lighthouse on the SE end at a height of 325 feet, with a fog siren. Great caution should be paid both to the weather and time of tide when negotiating the Mull. The dangerous race extends for 2 or 3 miles, according to the wind, and the tide sweeps past with great velocity—4 knots at Neaps and 6 knots at Springs. Two golden rules should be borne in mind by yachts of even moderate tonnage : (1) Do not attempt to round the Mull except in fine settled weather. (2) Either keep 5 miles outside, or else pass inshore, choosing the hour of slack water, which corresponds with the time of H.W. Liverpool. As a further warning bear in mind that this peninsula is exposed to the Atlantic swell, and that hazy weather is often to be expected.

East Tarbert Bay on the East side is convenient for waiting, an opportunity to go round the Mull. Anchor in 2 fathoms, sandy bottom, NW of the lighthouse, where you will find shelter from SW winds.

Loch Ryan. A nasty sea may be found off Corsewall Point, but there is a lighthouse here on the head 160 feet high, with fog siren. On Cairn Point there is a lighthouse 46 feet high. In entering this loch, avoid the West side and beware of (a) The Scar, and (b) The Spit on the West shore opposite Cairn Point Lighthouse. These two shoals are marked by two red conical buoys which will be left to starboard when coming in. The best anchorage is to be found after rounding the southernmost of these two, and having altered course to NNW so as to reach a berth at the western side of The Spit in an area known as "The Wig." Here you will find $1\frac{1}{2}$ fathoms, sand and mud. In SE gales this anchorage may be sufficiently disturbed to prevent going ashore in boats, but when the wind veers to SW there is excellent protection. Dairy produce, chickens and fresh water, obtainable from farm. All other stores can be procured at Stranraer. The latter is situated at the southern end of Loch Ryan. If remaining there, bring up NNW of the pier, but use the lead lest you get too far westward into shoal water. From Stranraer the steamers run to Larne. Beware of the wash from railway steamers entering Loch Ryan up to the pier.

Spring tides rise 9 feet. Neaps rise 7 feet. For time of high water add 50 minutes to H.W.D.

Ayr Harbour is at the mouth of the River Ayr. Leave the red conical buoy to starboard, and enter on a course SE by $E\frac{1}{2}E$. The entrance is formed by a breakwater and two piers. Strong freshets come down after heavy rains. Bring up off the patent slip on the South side, and run out a stern line to the pier. There is a tidal basin on the North side of the harbour which has a depth of 15 feet at low

water Springs. If by day two vertical balls are hoisted, or by night two red vertical lights, from the pilot house, this means that vessels are prohibited from entering. Leading lights in line are shown on the above bearing.

Spring tides rise 9 feet 10 inches. Neaps rise 8 feet 4 inches. For time of high water add 1 hour to H.W.D.

All supplies are procurable.

Troon is an artificial harbour quite easy of entrance. Pass the red buoy, West of the West Pier to starboard. Thence steer to round the West Pierhead. Anchor off the Ailsa shipyard in $1\frac{1}{2}$ fathoms, or else go alongside the quay. Otherwise go into the basin, which has not less than 15 feet at low water Springs.

All supplies and repairs available.

Spring tides rise 9 feet. Neaps rise 7 feet. For time of high water add 1 hour to H.W.D.

Ardrossan. There is good anchorage behind the break-water in 2 fathoms. The entrance of this artificial harbour is 300 feet wide, but yachts should not by night come in when two red vertical lights are shown near the pilot house. Beware of the Campbell and Eagle Rocks. All supplies can be obtained ashore. Spring tides rise 10 feet. Neaps rise 7 feet 11 inches. For time of high water add 1 hour to H.W.D.

Isle of Arran (Firth of Clyde) :—

Lamlash on the East side of Arran Island affords excellent shelter in the bay with Holy Island on the eastern side. The entrance is easy either from the North or the South. If approaching from the South, leave the Fullarton Rock buoy to port. During westerly winds anchor off Lamlash village in 3 fathoms off the Old Pier. During fresh easterly winds it is well to bring up under Holy Island as convenient.

A good anchorage for all winds except from NW can be chosen at the SW corner of Lamlash Bay between Kingscross Point and Kingscross Ferry. Use the lead and let go as soon as you get 5 fathoms. Beware of the squalls which characterize this bay; also of the mooring buoys abreast of Lamlash.

Spring tides rise 10 feet. Neaps rise 7 feet. For time of high water add 1 hour to H.W.D.

Campbeltown Loch gives very good shelter, and is sometimes used by bigger yachts as a port of departure both for rounding the Mull of Cantyre and for crossing the North Channel to Larne or Belfast. Small craft bound from the Clyde to North Ireland will find it easier to cross from Lamlash or Campbeltown to Loch Ryan, and thence to Belfast Lough. When entering Campbeltown Loch, which is well marked, leave Campbeltown Outer buoy (black can) to port after passing Davarr lighthouse (120 feet high) at the NE end of Davarr Island. Next will be seen on the South side a grey concrete beacon surmounted by a black tank, at the end of The Dorling. This is Millmore Beacon and has a light. Pass between this and the red conical red Millbeg buoy which is to the North. There is another beacon—also on the North side—coloured red, conical, with ball, which marks the French flat, and will be left to starboard. Anchor on the South side of the loch off the lifeboat jetty. There are shops ashore, and steamers run to Gourrock.

Spring tides rise 8 feet 9 inches. Neaps rise 6 feet. For time of high water add 1 hour to H.W.D.

Mull of Cantyre (see page 250).

Loch Fyne. The entrance is easy, being wide and very deep. The Sgat More beacon (white tank on concrete pile) marks the South end of Skate Island, and has a flashing light. But there are no dangers in mid-channel when coming up

from the South to East Loch Tarbert, which is on the port hand. There is good anchorage off the South of Barmore peninsula, as also in Tarbert, near to Dickie's yacht yard where all repairs can be made. Also on the West side of Loch Fyne, but further North, lies the western arm known as Loch Gilp where the stream is but slight. Here is **Ardrishaig** at the entrance to the Crinan Canal. On the pier head is a white lighthouse with red band which will be readily seen, the rocks in the approach being marked by two red conical buoys, being left to starboard.

The Crinan Canal serves in regard to the Mull of Cantyre as the Panama Canal to Cape Horn, and enables craft to proceed from the Clyde direct via Loch Fyne to western Scotland thus saving both a distance of over 80 miles and heavy seas. When about to enter the canal, anchorage can be chosen just inside Ardrishaig breakwater, or else secure to the pier where a depth of 9 feet can be found at low water Springs. Entrance to the canal is behind the breakwater. Whilst waiting at Ardrishaig provisions, drinking water, and motor fuel can be obtained. A steamer runs to Greenock.

The sea-lock can be entered only from half flood to half ebb, and when going in keep parallel with the breakwater from the centre of the gates. The canal is 9 miles long and emerges at Crinan. There are 16 locks and several swing bridges, and 4 hours will be required to go through this artificial waterway. Yachts up to 88 feet long, 20 feet beam and 9 feet draught are admitted, the charge being 1/- per foot of length, measured between perpendiculars. Minimum charge 35/-. Hire of horse and tracker 25/-. Yachts under power keep clear of vessels being tracked. Yachts going West have the right of way. Plenty of fendoffs should be used to protect the yacht's sides. Tyres disallowed, as they jamb lock gates.

Upper Loch Fyne. If not using the Crinan Canal and intending to explore Loch Fyne in its upper reaches, beware of the Otter Spit on the South side, which is marked by a lighted beacon. A little to the East is Otter Bay which is an anchorage, and at night will be seen a fixed red light on the pier head. Leave the Otter Spit beacon to starboard when coming up. On the West side is the small natural harbour of Loch Gair, being easy of access and well sheltered. If proceeding still further up Loch Fyne, navigate the Minard Narrows with caution because of the rocks and strong tide, Paddy Rock being marked by an iron framework beacon 22 feet high, with a flashing light, and Otter Rock having a red beacon with cage topmark. At the head of Loch Fyne is Inverary with a stone pier and moderately sheltered anchorage.

At Ardrishaig Spring tides rise $10\frac{1}{2}$ feet. Neaps rise 9 feet. For time of high water add 1 hour 5 minutes to H.W.D.

Some Clyde Anchorages.

Gareloch is well marked at its approach by the Rosneath Patch light beacon and also black can light buoy. There is an anchorage sheltered from SW winds in the bay just above Roseneath Point; also off Helensburgh Pier, on the East side of the loch, in 2 fathoms, sand and mud, though this berth is exposed to southerly winds. Village stores and water can be obtained at Roseneath, but at Helensburgh practically everything, including motor fuel. If proceeding up Gareloch, remember that through the Narrows runs a 5-knot tide. The best plan is to choose slack water, leaving the lighted red beacon on the East side to starboard.

Spring tides at Helensburgh rise 10 feet 7 inches. Neaps rise 8 feet 8 inches. For time of high water add 1 hour 10 minutes to H.W.D.

Loch Long is easy of navigation but, like many of the Scottish lochs, subject to fierce sudden squalls. All dangers are avoided if the shore is given a good berth. On the East side there exist anchorages at Cove and Coulport. On the West side bring up off Blairmore. At the SW end of Loch Long is the **Holy Loch**, which is very popular among yachtsmen. It is 2 miles long, devoid of all dangers, and capable of access at all times. The only necessity for caution is the spit off Strone Point on the North side, but this is marked by a (black) light buoy (occulting). When coming in, leave it to starboard. At Hunter's Quay anchor in 3 to 5 fathoms off Hafton House, but beware of yacht moorings. Headquarters of the Royal Clyde Yacht Club, also shops. Steamers run to Greenock. At Sandbank anchor SE of the pier well off the shore. There is a yacht-builder's, also a sailmaker. All repairs, water, and stores procurable. **Loch Goil** is an arm at the NW side of Loch Long and notorious for its treacherous squalls followed by sudden calms. Beware of Government torpedo range.

Spring tides rise 10 feet. Neaps rise 8 feet. For time of high water add 1 hour to H.W.D.

Gourock Bay is perfectly easy to enter. Anchor at the SW side, which is an excellent berth in westerlies, but exposed to easterly winds. Anchors should be buoyed before letting go. Gourock is very convenient not merely for Glasgow, but for the local shops, boatyards, sailmakers, and steamers, besides being a good centre whence the Clyde cruising grounds can be explored. Beware of local moored craft and steamers calling at pier.

Spring tides rise 10 feet. Neaps rise 8 feet 8 inches. For time of high water add $1\frac{1}{4}$ hours to H.W.D.

Wemyss Bay has anchorage in 2 fathoms, but it is exposed to SW winds. On the East side of **Great Cumbrae** Island in Balloch-Martin Bay there is a good anchorage in 4 fathoms. Similarly on the East side of **Little Cumbrae**

there is anchorage in 2 fathoms giving shelter from SW winds. It is on the West side of Little Cumbrae that the white lighthouse stands which in addition to its double flashing light has a speaking beacon which is made use of by yachts fitted with wireless. The wave length is 1044 metres. First listen for the word "Cumbrae" being spoken. This will then be followed by 3 blasts of the fog signal. In order to denote distance from the lighthouse there will then follow a series of numbers, up to 10, which signify so many cables up to 1 mile, when a bell rings. Then 1, 2, 3, 4, and so on up to 5 miles which represent the distance in nautical miles of distance.

Bute. Rothesay Bay at the eastern side of this island provides good anchorage, and is easy of navigation, but beware of the mooring buoys, and give the shores a clear berth. Let go anchor off the bathing place, where there is shelter from SW winds but exposed to the NE winds which send in a nasty sea. Even with westerlies there come savage squalls. Water and stores available. Steamers run from Gourock. Spring tides rise 9 feet 7 inches. Neaps rise 7 feet 7 inches. For time of high water add 1 hour to H.W.D.

The Kyles of Bute are the channels at the North end of Bute Island. There is anchorage in the West Kyle at Tighnabruaich between the jetty and the pier in 6 fathoms, but beware of the buoys' moorings. Buoy your anchors. There is also anchorage in Blackfarland Bay opposite Tighnabruaich. At the latter are shops, fresh water, boat-yard, motor fuel. Steamers call from Gourock.

Spring tides rise 10 feet. Neaps rise 8 feet. For time of high water add 1 hour to H.W.D.

NOTE. Except where otherwise stated, 10 feet at Springs and 8 feet at Neaps may be taken as the general rise of tide in the Firth of Clyde, and dangers are so well marked that

yacht navigation is comparatively easy. But fogs, mists, squalls, and hard weather cannot be ignored.

Forth and Clyde Canal. (See also under Firth of Forth in Chapter X.)

Proceed from Greenock and enter Bowling Outer Harbour, which is accessible for small craft at all states of the tide. Lie alongside the East or West side of the harbour, unship your bowsprit (and bumpkin, if a yawl) and put plenty of really efficient fenders round the topsides. (Either pneumatic tyres, or sacks of straw with boards on the outside, are the best.) If possible, put the dinghy on deck.

You now enter the sea-lock. There are two at Bowling, but that direct off the Clyde is more suitable for small craft. Having passed through swinging and lifting railway bridges and a footbridge (all worked hydraulically) berth in the basin, where the Harbour Master will show every courtesy. Vessels without power can be towed by horse and man at a charge of £3 15s. od. The dues are a minimum of £1 10s. od. up to 15 tons. Motor fuel can be obtained at Temple. From Bowling to Maryhill are 19 locks and a distance of 8 miles, but here come a number of bends requiring care. Next follow 16 miles with no locks but about a dozen bridges. You then descend through 18 locks to Grangemouth Basin, where preparations can be made for sea. Leave the sea-lock at Grangemouth any time between 4 hours flood and 3 hours after high water.

At Bowling Spring tides rise 12 feet. Neaps rise 10 feet. For time of high water add $1\frac{1}{2}$ hours to H.W.D.

The Mull of Cantyre is bold, steep-to, lofty, wild, and rugged. Bad weather off here may be expected more frequently than not. The southern extremity of the Mull is Deas Point, but the Mull of Cantyre lighthouse, which is white and 297 feet high, is at the SW corner. It has a fog

siren. In bad weather, with wind against tide, the seas are impossible for small craft, rendering the passage extremely dangerous. There exists a notorious race, which is worse during the last quarter of the ebb. Even when it is slack water off the Mull light, there still remain signs of the race off Deas Point.

When bound North up the West coast, round Deas Point before half ebb, so as to be off Machrihanish Bay just when the tide begins to set in a northerly direction. If, however, bound South, reach Machrihanish with the last of the ebb, and carry the flood round the Mull.

East of Deas Point the tide runs East from 6 hours before local high water until high water. It runs West from high water till 6 hours after high water. To find the time of high water subtract 30 minutes from either Dover or Liverpool. The tide's velocity is from 4 to 5 knots, the race being caused by the last of the West-going tide from Sanda Island meeting the South-east-going tide off Deas Point; and southerly gales accentuate the disturbance. Thus it would be foolish for small vessels to double the Mull except in fine, settled weather.

If bound South down the West coast, give the Skerrivore Rocks a good wide berth. Machrihanish will be identified by its Golf Links and tall chimney, low land, and sand hills. Sanda Island, SE of the Mull, has a white lighthouse 165 feet high on Ship Rock and possesses a fog siren. Beware of the Patterson Rock East of Sanda Island, but marked by a black bell buoy with staff and cage. During heavy weather this buoy may no longer be in position.

There exists an anchorage at the North side of Sanda Island East of a spit which is marked by a red pillar buoy with ball topmark. The Arranman Barrels, which lie off the SE extremity of the Mull and uncover at low water, are marked by a black can light buoy. Sanda Sound with its strong current and ominous overfalls, its perpetual boiling

seas, and strong squalls which rush down from the high land, is a thoroughly unpleasant place for yachts.

Gigha Island on the West side of Cantyre is separated from the latter by Gigha (pronounced Ghia) Sound, which should not be used except by those possessing local knowledge. There is, however, a useful anchorage which will be found of convenience before or after rounding the Mull of Cantyre. In approaching from the South, keep Leam Point close aboard to avoid the reefs North of Cara Island. Let go anchor in 3 fathoms with the North peak of Gigulum just open of the South end of Oulsin. The reefs keep down the sea, and you will ride here in safety, though there is some tide. Sheltered from all winds. But this is the only anchorage to be recommended. Outside is a lighted float buoy. Keep this to starboard, going North, and you clear everything. Spring tides rise only 3 feet 7 inches. No regular tide at Neaps. For time of high water add $3\frac{1}{2}$ hours to H.W.D.

West Loch Tarbert (Cantyre) lies ENE of Gigha and is 9 miles long. It affords good anchorage and perfect shelter. The tide's velocity is from $1\frac{1}{2}$ to 3 knots. Small craft can sail right to the head, and there is a berth off Carrick Point in $1\frac{1}{2}$ fathoms. At the entrance to West Loch Tarbert is the small island of Elin Trein. When coming in, keep within $1\frac{1}{2}$ cables of the loch's southern shore. The rise of tide at Springs being only 4 feet, with no regular rise at Neaps, it is better for a stranger to visit this loch at low water because numerous rocks at high water are just awash. The shores are well wooded and a walk across the peninsula may be taken to reach East Loch Tarbert (see above).

For time of high water add $3\frac{1}{2}$ hours to H.W.D.

Loch Swen is about 8 miles long. The best anchorage is on the West side in Tayvallich Harbour. Let go in 2 fathoms off the village, where stores are procurable. Loch

Swen is famous for its beauty, with many bays, hills and woods. There is a strong tide off the entrance to Loch Swen. Springs rise 6 feet. Neaps rise 2 feet. High water about $4\frac{3}{4}$ hours after H.W.D.

Crinan Harbour. Anchor West of the Canal in a little bay beside the lock in 2 fathoms. Good shelter. Vessels up to 9 feet draught can enter the Canal at any state of the tide. (For details as to Crinan Canal see above under Ardrishaig.) Spring tides rise 7 feet. Neaps rise 4 feet 10 inches. For time of high water subtract 6 hours from H.W.D. As a result of exceptionally dry weather, it is sometimes necessary to close the Crinan Canal through lack of water. It is closed on Sundays.

Oban. The anchorage is quite deep for small craft, but a berth may be chosen North of the pier, or else in Carding Mill Bay. Off Brandy Stone Rock there is sheltered and recommended anchorage. All provisions, yacht stores, and repairs procurable. Spring tides rise about 11 feet. Neaps rise 8 feet. For time of high water subtract 5 hours 20 minutes from H.W.D.

Sound of Islay is 11 miles long, and the tide runs at a velocity from 3 to 6 knots. Keep over on the Islay side. The Sound is of convenience for cheating the Atlantic in bad weather. It is easy of navigation. When going North, leave the red conical buoy to starboard. The anchorages in the Sound are uncomfortable, lacking shelter, and the holding ground is not good.

The only real harbour on the **Island of Islay** is Port Ellen, but the anchorage is uncomfortable though tolerable. To clear the patches on either side when entering, bring Carraig Fada grey tower on the West side to bear NNW. The lighthouse here is 65 feet high. Anchor off the pier, alongside which the local steamer remains.

The Small Isles on the East side of Jura, five in number, afford shelter. The best anchorage is inside the southernmost, i.e. Goat Island. Enter between a black perch and Goat Island, bringing up off the shore in 2 fathoms. The holding ground is only fair. Lowlandinan's Bay is the best anchorage in Jura.

West Loch Tarbert on the West side of Jura, though not frequently visited by yachtsmen, affords good anchorage for all weathers, and is completely land-locked, in a small bay on the North shore. Let go in 4 fathoms, mud. This is a lonely locality, with rocks, islands, heather, deer, seals.

Spring tides rise 11 feet. Neaps rise 8 feet. For time of high water add 5 hours 50 minutes to H.W.D.

The Gulf of Corryvreckan is the strait between the North side of Jura and the South side of Scarba ; it is notorious for the savage character of its seas which can become alarming to even the largest yachts. The stream has a velocity of more than 8 knots, Springs, with overfalls, eddies, and races. There is scarcely any slack tide, and a good breeze against the stream causes considerable turbulence. There have been occasions when moderate-sized yachts have passed through, but this strait is best avoided. It can be tackled, however, during Neaps when the wind is with the tide and the breeze is mild. The presence of ripples will serve to give warning. Keep in mid-stream, and get through quickly. Bound West, keep to South shore, leaving small island to port.

Mull. On the East side there is perfect anchorage in Loch Spelve. Whilst entering, keep over towards the North shore, and finally bring up in the SW corner. The Sound of Mull is the regular highway when bound from Oban up the West Scottish coast to Skye, Stornoway, etc. Loch Aline on the North side of the Sound (which is well marked, presents no difficulty, and has various temporary anchorages

on its shores) is a beautiful and excellent anchorage through a narrow entrance. Bring up either on the East or the West side of the loch. Spring tides rise 13 feet 9 inches. Neaps rise 10 feet 6 inches. **Tobermory** is easy of access. Let go anchor off the Old Pier in 2 fathoms. There are shops ashore, where motor fuel and fresh water can be obtained. Spring tides rise 13 feet 10 inches. Neaps rise 10 feet 8 inches. For time of high water subtract 5 hours 12 minutes from H.W.D.

The West side of **Mull** is exposed to the full force of the Atlantic. In bad weather small craft should give Caliach Point, the NW corner of this island, a berth of at least 3 or 4 miles. But not many yachts visit this side, though a little further South are such places as Gometra, Ulva, Staffa, and Iona.

Between **Gometra** and **Ulva** there is a perfectly sheltered anchorage in $2\frac{1}{2}$ to 5 fathoms. Whilst entering, keep in the centre, and then let go towards the East side, where the harbour widens out. At **Staffa** there is too much ocean swell for any but temporary anchorage.

Iona and its neighbouring rocky islets form rugged evidence of the Atlantic's fury, but there is anchorage for small craft in Bull Hole (Sound of Iona). This sheltered berth lies between the Ross of Mull and Eilean Nam Bhan. Enter from the South. There is a ring on the island to which a warp can be made fast. There is a strong tide in Iona Sound, and it would be difficult to reach the Bull Hole after dark. It is essential to moor, because the space is restricted and the tide may be inclined to trip your anchor. When entering, keep close to the South extremity of Eilean Nam Bhan, avoiding the bank in the middle of the Sound. Avoid the Bull by hugging the Mull shore.

Spring tides rise 14 feet 3 inches. Neaps rise 10 feet 9 inches.

The Islands of **Coll** and **Tiree** are exposed as to their western side, and even on their eastern side complete security is hard to find. The prevailing winds being westerly, it is better to approach them from the North or South, rather than have to beat across the Passage of Tiree. At **Coll** there is anchorage in Loch Nan Eathar on the East side of Eilean Nan Eathar. There is not much space. Enter under power. Sheltered from all winds except SSE. In **Tiree** bring up in Gott Bay, but this is really satisfactory only when the wind is not in the SE quadrant. Anchor off the new concrete pier. Beware of the numerous reefs, and navigate with great caution. Both Coll and Tiree are populated, and some provisions can be obtained. Tiree has excellent snipe shooting, and there is a Post Office at Scarnish. Spring tides rise 12 feet. Neaps rise 9 feet.

Loch Sunart at the North end of the Sound of Mull contains a number of excellent anchorages. Treacherous squalls.

Loch Linnhe presents no difficulties. Opposite Fort William, where there are shops, is a small island. The best anchorage is between this island and the shore. The Caledonian Canal begins at Corpach, which is at the northern end of Loch Linnhe, and continues to Clachnaharry (near Inverness) via natural lochs and an artificial waterway. There are 29 locks, and less than a dozen swing bridges: This route is available for vessels up to 160 feet long, 38 feet beam, and 14 feet draught. The charge is 2/6 per gross ton, with a minimum of £5. The best time to reach Corpach, when bound North, is at top of high water. Chart and list of regulations are obtainable at the offices when about to enter. At Corpach Spring tides rise 12 feet. Neaps rise about 8 feet. For time of high water subtract 5 hours from H.W.D. (See Chapter X.)

When bound North from Tobermory remember that

Ardnamurchan Point, with its grey granite lighthouse (180 feet high) and explosive fog signal, is exposed to the Atlantic. Wicked seas are frequently encountered, and it is well to give this headland a berth of 2 miles. Visibility may also be very bad.

Eigg Island. There is good anchorage off the SE end. Bring up North of Eilean Chasgaidh Island off the jetty in 3 fathoms.

Rum Island. The only good anchorage is in Loch Scresort on the East side of the island, in 3 fathoms. Bring up on the port hand when entering, abreast of the church. No stores available. Spring tides rise 14 feet. Neaps rise 11 feet.

Isle Ornsay, Skye. This harbour affords excellent anchorage, being easy to enter, and sheltered from all winds. Let go in 2 fathoms at the centre of the bay. Water and a few simple stores available ashore. Spring tides rise 14 feet. Neaps rise 10½ feet.

Kyle Rhea. Between Skye and the mainland the tide at Kyle Rhea narrows attains a velocity at Springs of 8 knots. This should be tackled at slack water and in mid-channel. With wind against tide in the Sound of Sleat there is a considerable jump. At **Kyle Akin** anchor West of the pier in 4 fathoms.

Broadford Bay. Bring up off the pier, where the holding ground is tenacious. There is now a light at the North end of the pier and another at the South end. They are 22 yards apart and serve as leading lights to keep vessels clear of a sunken rock off Irishman's Point.

Loch Kishorn is quite easy of entrance, but give the North shore a wide berth. There is excellent anchorage either at the head of the loch or behind Kishorn Island.

Loch Na Beiste. During hard SW winds good shelter can be found at the head of this loch, where the water is deep. Both Loch Ainort and Loch Sligachan offer convenient anchorages, but be alert for heavy squalls. **Kyle of Alsh.** Anchor off pier. Oil fuel obtainable. Railway. Port of departure for I. of Skye. Steamers to Portree.

Portree Harbour is wide and easy of entrance. Anchor in $2\frac{1}{2}$ fathoms NE of the pier. Beware of squalls. There are shops ashore, and fresh water is procurable.

Loch Torridon is a beautiful large arm on the mainland, about 11 miles long, with a background of wonderful mountain scenery. An anchorage could be chosen on the South side in the central portion of Loch Torridon known as **Loch Shildaig**; or else at the head of Upper Loch Torridon near Sallan Island in 2 fathoms. Spring tides rise 17 feet. Neaps rise 12 feet. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D. At Annat will be found a small shop and Post Office. There is yet a third anchorage which can be recommended, and may be preferred if wishing to stop only a night. This is on the South shore, only 3 miles from the entrance. Let go off Kenmore in a bay known as Loch Craig. This is well sheltered, and the holding ground is good.

When navigating the **Sound of Raasay** there are no dangers provided you keep in the centre. At the NE end of Skye is **Kilmaluig Bay**, which has an anchorage at the top of the bay good for westerly, but exposed to easterly, winds.

On the NW of Skye there are some excellent anchorages in **Loch Snizort** such as Uig Bay on the East side, Aros Bay on the West side, but especially in Little Loch Snizort, which is at the SE end.

On the West side of Skye the anchorages are generally too exposed to be recommended for small craft, except at a few places where local knowledge or special caution is requisite. When rounding Vaternish Point from the East, keep well away. On its western side the tidal stream always flows North but curves round the headland in an eddy half a mile wide, with a strong ripple. One can navigate with care right up **Loch Dunvegan** to its head, and bring up off the church in 4 fathoms. **Soay Harbour** at the North end of **Soay Island**, whilst being little more than a narrow creek with only 2 feet on the Bar, provides sheltered anchorage.

Loch Scathvaig, to the NE of Soay Island and on the South side of Skye, is most impressive. It can be approached either from the South or from the West through Caol Sea. Fierce gusts or gales even during summer months are by no means rare. Small sailing craft should be prepared to reef quickly, but they will experience alternatively heavy squalls and sudden flat calms. Too much reliance must not be placed on the chart of Loch Scathvaig, which has been found unreliable in more than one detail, and the Ordnance Sheet is to be preferred. Strangers should on the first visit enter at low water in order to sight the extremities of the dangerous reefs. At the western side are the bare, precipitous cliffs of the Gairsbheinn hills, which are just under 3000 feet high, whilst on the NE side is a small natural harbour. The best anchorage is between the head of the loch and Eilean Glas. The latter is a reef which forms a natural breakwater thus creating a pool having a depth of 2 fathoms. Here you should bring up with two anchors, and the wind may turn the water into a sheet of white smoke, causing a small craft to heel impetuously, yet the area is too small for any sea to get up. The holding ground is excellent, and the scenery awe-inspiring.

When entering, a northerly wind makes matters exciting,

for the squalls come down with a hissing roar from the mountains. With onshore winds there are still ugly gusts, but the approach for a vessel under sail is easier. The following instructions should be followed scrupulously. To the West is Eilean Rheamar, which must be left to port. Between there and Eilean Glas there is the dangerous rock Sgeir Doighich which must likewise be left to port. But it must also be remembered that the West side of Eilean Glas possesses a perilous projecting reef, which at high water is invisible. Therefore, when entering, keep 100 yards East both of Eilean Rheamar and Sgeir Doighich, which can readily be done by a bearing of Sgurr Du over the West end of Eilean Glas. When half-way between the latter and Sgeir Doighich, alter course to port and then hug the western shore till you are well past Eilean Glas ; you may then turn to starboard and let go on the latter's North side.

Spring tides rise 12 feet. Neaps rise 9 feet.

The Outer Hebrides.

The Shiant Islands comprise several islands and islets, and should be avoided in bad weather. The tides round here have a velocity of 2 to 4 knots, sometimes accompanied by dangerous overfalls. There is no really good anchorage for all winds, but protection can be found when the wind is from North through West to South, though there may still be swell to contend with. Small craft should not cross the Minch except during a spell of fine weather.

Stornoway Harbour requires only ordinary caution when entering. All dangers are well marked. Leave red beacons and buoys to starboard, as you come in : black beacons to port. There is a white lighthouse, 56 feet high on Arnish Point, and a light beacon off the Beacon Rocks. Anchor in Gumach Harbour in 3 fathoms. Most provisions and stores are obtainable, including fresh fish and motor fuel. Also Harris tweeds.

Spring tides rise 13 feet 8 inches. Neaps rise 10 feet. For time of high water subtract 4 hours from H.W.D.

Loch Erisort is a large, well-sheltered inlet with numerous excellent anchorages at choice. **Loch Odhairn** is easy to enter, and has safe anchorage near the head of the loch. **Loch Shell** can be entered by leaving the islets to port. Anchor at the head of the loch. In **Loch Seaforth** bring up North of Eilean Seaforth. **East Loch Tarbert** (Harris) should be entered with caution because of the numerous submarine rocks which are unmarked. Anchor in the North Harbour, Scalpay. Spring tides rise 14 feet. Neaps rise 10 feet. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D.

The Sound of Harris is characterized by small islands, also by peculiar diurnal and nocturnal tides up to a velocity of 6 knots. The ship channel is well marked. On Red Rock is a black beacon, pyramid-shaped with cage; Jane Tower has a white stone beacon; and Cook's Rock a red beacon.

North Uist (1) Loch Maddy. Leave Weaver Point to starboard, and beware when entering during bad weather. Not an ideal harbour for small craft. Anchor to the West of the Ree Lee islets in 3 fathoms. Holding ground not to be trusted. (2) Loch Eport. There is good anchorage on the North side in 2 fathoms.

South Uist. (1) Loch Skipport is an excellent harbour affording splendid shelter. Anchor on the North shore in McCormack Bay in 3 fathoms. (2) Loch Eynort provides moderately sheltered anchorage at the NW corner in 2 fathoms. (3) Loch Boisdale. For the best anchorage leave Kisgay Island to port, and the red buoy to starboard. Then

enter Boisdale Harbour and let go anchor abreast of the pier in 2 fathoms. There is perfect shelter. Oil fuel and stores are procurable.

At Loch Boisdale Spring tides rise 12 feet 9 inches. Neaps rise 9 feet 6 inches. For time of high water subtract 5 hours from H.W.D.

Gairloch. The entrance is wide and easy. The best anchorage is on the South side in Badacro Harbour. Approach from the NW side, leaving Eilean Horrisdale close to. Bring up in 2 fathoms West of that island at the mouth of Badacro Harbour, SE of Sgeir Ghlas. Spring tides rise 14 feet. Neaps rise 10 feet. At Badachro can be obtained meat, fish, dairy produce, potatoes, and bread.

Loch Ewe during the War was used for a time as one of the anchorages for the Grand Fleet and other naval vessels. It is wide and easy of entrance, with a length of 7 miles. If stopping only temporarily and anxious to leave, bring up off the pierhead of Aird Point (opposite the NE side of Ewe Island). But the best anchorages are either at the head of the loch out of the tide, or in Camus Bay at the SW end of Loch Tunnag (which is on the SE side of Loch Ewe). Spring tides rise 15 feet. Neaps rise 11 feet. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D.

Loch Broom provides excellent anchorage off Ullapool, but it is also possible to bring up among the Summer Isles. **Loch Inver** gives perfect shelter at the head of the loch, off the pier. **Loch Laxford** possesses a number of good anchorages on the North side of the islands, and easy to enter. In addition to the Crow anchorage, there are good berths towards the head of the loch. In Loch Skercha and The Basin will be found ideal security for small craft, though the approach to Loch Skercha is quite narrow.

It is essential that small craft cruising off this North Scottish coast and bound round Cape Wrath should select fine weather. The northern shores of Sutherlandshire are exposed to the Atlantic, with no protection from the Hebrides. All headlands should be given a berth of 2 or 3 miles, and strong winds with heavy gusts must be expected with considerable sea. Even during an occasional calm there is a swell so heavy as to worry a small sailing yacht and cause serious chafe to her gear.

Cape Wrath is bold, gaunt, perpendicular, and forbidding. It has a white lighthouse 400 feet high, with a fog siren. Wind against tide here knocks up an ugly sea. It is to be noted that at a distance of half a mile North of Cape Wrath the tidal stream goes East from $4\frac{3}{4}$ hours after H.W.D., and sets West from $1\frac{3}{4}$ hours before H.W.D. with a velocity of 3 knots during Springs. Close inshore—that is to say, within half a mile—the stream sets to the westward constantly; but beware of the Stag Rock which lies only $\frac{3}{4}$ mile East by North of Cape Wrath, as towards this obstruction a vessel hugging the land might be set. The swell breaking over the Stag should reveal the rock's position.

Loch Eriboll is 11 miles East of Cape Wrath and not difficult of entrance, with little tide when once inside. This peaceful haven offers a great contrast to the turbulence immediately outside, but beware of the violent squalls which rush down from the mountains. The scenery is magnificent, and Ben Hope is an impressive mountain. A small craft will find suitable anchorage in Kampy Bay, Camus An Duin; also at the SW end of the loch on the East side in 4 fathoms. There is a Post Office, and some stores are procurable; but the principal attraction of Loch Eriboll consists of its being a convenient port of departure when bound West round Cape Wrath. Spring tides rise $14\frac{1}{2}$ feet. Neaps rise $10\frac{1}{2}$ feet.

For time of high water subtract 3 hours 6 minutes from H.W.D.

NOTE. If overcome by a SW gale when coming from the eastward, and unable to make Loch Eriboll, an emergency anchorage can be chosen close to the Kyle of Tongue East of Rabbit Island, between the second and third islands when entering. There is also an anchorage in Talmine Bay behind a small island which at one time was joined to the shore by a breakwater; but the berth is not comfortable. A few stores can be obtained, and there is a Post Office. Beware of a dangerous rock NE of the island.

Thurso is not a suitable place for a yacht. If compelled to put in here, lie alongside the quay though you will dry out, and the shelter is none too good. At the West side of Thurso Bay is Scrabster Harbour, where you will also dry out alongside the quay.

Pentland Firth is notorious for its tides, heavy seas, and eddies. On December 15, 1914, the two British cruisers *Blanche* and *Boadicea* (each of 3300 tons) whilst passing through the Firth in bad weather received such heavy damage that they were forced to run back into Scapa, the *Boadicea* having had her bridge swept away and several of her crew drowned. The NE coastline of Caithness between Dunnet and Duncansby Heads is magnificent but inhospitable; impressive yet forbidding. Above all, no liberties can be taken with the tides, which must be studied meticulously before attempting to negotiate the Firth. Now off Dunnet Head the tidal stream runs West at 1 hour before H.W.D., and East at 5 hours after H.W.D., attaining a velocity of 8 knots and more. It will be realized that with a strong breeze against tide there is created a wicked sea, accompanied by whirlpools, races, eddies. Yachts should, therefore, never tackle the Firth when wind

and tide are opposed. Cover up skylights; and close hatches, shorten sail, and be watchful of the eddies which are as treacherous as they are powerful. Off St. John's Point is the well-known "Merry Men" race, and off Duncansby Ness exists a dangerous overfall, whilst around Stroma Island there are extensive eddies, thus : (1) When the tide is setting West this eddy will extend for about 3 miles NW of Stroma ; (2) When the tide is setting East, the eddy will extend for about 1 mile to the SE. At the southern end of Stroma Island, whether the tide is running East or West, the eddy extends for at least $\frac{1}{2}$ mile from the shore. The area between the mainland and the South of Stroma is known as the Inner Sound : that between Stroma and Swona is the Outer Sound. At the eastern end of the Firth lie the Pentland Skerries, which also have an eddy about 2 miles long whilst the tide is setting to the SE.

Negotiating Pentland Firth. Some yachtsmen will prefer to obtain the services of a fisherman as pilot, but even small yachts can pass through unaided. The simplest conditions will be found during calm weather and at Neaps, using auxiliary power or with the wind abeam or astern. If coming from the SE, keep fairly close to Duncansby Head, arriving there just before the East-going tide has finished, i.e. before high water. In other words, aim to take the ebb through the Firth. From Freswick Bay to Duncansby Head there is slack water for 10 hours : thus, a yacht which has anchored in Freswick Bay will have no difficulty in timing her departure. Next steer inshore to avoid the perilous race off Duncansby Ness, pass through the Inner Sound and close to St. John's Point where you should arrive at slack water. During the West-going tide the "Merry Men" race extends right across to Brimms Ness on the Orkneys shore.

If bound from the West, carry the East-going tide to St. John's Point. If the stream has still a good time to run,

choose the Inner Sound ; if the stream is almost spent, go through the Outer Sound, keeping not less than a mile North of Stroma to avoid the tide-rips, and then pass on a SE course midway between Pentland Skerries and Duncansby Head, utilizing the last of the East-going stream. The ugly swirls at the North of Stroma and South of Swona can easily be avoided by keeping in the centre of the Outer Sound.

At Duncansby Head Spring tides rise 10 feet. Neaps rise 7 feet. For time of high water subtract 50 minutes from H.W.D.

Duncansby Head has a white lighthouse, 220 feet high, with fog siren. Stroma has a white lighthouse, 104 feet high, at its northern end, with fog siren : at the southern end of Stroma there is a black beacon, pyramid-shaped with cage. Dunnet Head has a white lighthouse, 346 feet high, with fog siren.

Orkney Islands. So numerous are the anchorages that it will suffice if the following are specially stressed.

A steamer runs from Thurso to Stromness, and the latter harbour can be entered via Hoy Sound, leaving Graemsay Island, with its white lighthouse, to the southward. Beware of the Skerry of Ness (which has a black beacon and flashing light) and the shoal to the North, lest the ebb tide set you on the same. Turn to port, and anchor in Stromness Harbour off the North Pier, the leading marks bearing NNW. Stores available. 'Bus to Kirkwall. Spring tides rise 10 feet. Neaps rise $7\frac{1}{2}$ feet. For time of high water subtract 2 hours from H.W.D.

Anchor in Scapa Bay, well up, North of the pier ; but even in northerly winds a nasty lop gets up if blowing hard. Walk into Kirkwall, where all stores can be obtained.

On the East side of Scapa Flow in St. Margaret's Hope, South Ronaldsay, off Needle Head there is a black pole beacon with barrel topmark. St. Margaret's Hope is very snug in all weathers. A few stores obtainable.

In Widewall Harbour, also situated on South Ronaldsay, use the lead and go as far inside as draught permits, shutting in Hoxa Head.

In Long Hope, on the western side of Hoxa Sound. During the War it was in Long Hope that trawlers and drifters had their base. Go so far up as convenient, having regard to direction of the wind. Both Widewall Harbour and Long Hope are suitable anchorages after entering by Hoxa Sound.

In Kirkwall Bay anchor at the SW corner, but use the lead. There is very moderate tide, Springs rising $8\frac{1}{2}$ feet, and Neaps only $6\frac{1}{2}$ feet.

It should be noted that whilst Scapa Flow itself has very little tide, the various entrances require care owing to the strong tidal streams. Beware also of any sunken ships in Burra Sound, Water Sound, and Holm Sound, as well as in the region of Cava Island where the German Fleet was sunk.

It is not unlikely that a craft visiting the Orkneys may be held up by weather for a few days. It is, therefore, well to have plenty of stores on board. Whilst dairy produce and fowls can be obtained almost at any anchorage, neither fresh water nor meat is so readily procurable. The first opportunity should also be taken for filling up the fuel tanks. Fish can sometimes be bought.

Cruising in the Orkneys neighbourhood is very different from sailing about the Solent; nevertheless, Scapa Flow is pretty well land-locked, and there are so many well protected anchorages that are ideal for small craft. St. Margaret's Hope is particularly snug. So is the anchorage off Longhope Pier, and it is possible to get a dinner and hot bath at the hotel. Stromness provides another really snug anchorage with an hotel by the pier. And there is an hotel at Kirkwall. There is a good deal of mist in these parts, and at some anchorages the presence of weed makes the holding ground treacherous.

CHAPTER X

THE EAST COAST OF SCOTLAND SOUTHWARDS

WITHIN Freswick Bay where, as already explained, it is convenient to await a fair tide through Pentland Firth, there is some protection from westerly, though not easterly, winds.

Wick Bay contains Pulteney Harbour, which is open to the NE, and should not be attempted during NE gales. The inner harbour dries out, and the outer harbour is uncomfortable during hard NE winds.

Wick Harbour is small, and untenable during fresh East winds. During July and August it is usually crowded with the Scotch herring fleet and becomes very dirty. These drifters may enter in the morning, land their fish, and be out again by the afternoon (weather permitting), causing the harbour at night to be empty. If compelled to quit and make room for the herring craft, a yacht could anchor outside off the pier provided the wind is not easterly. Approach to get the leading lights bearing NW by $W\frac{1}{4}W$, but when coming from the South a stranger may have a little difficulty in locating Wick until the point is rounded when the town will be seen lying between the hills. Beware of heavy squalls which come rushing down from the land. Make fast along side, within the harbour, and keep afloat. Most supplies procurable.

Spring tides rise 10 feet. Neaps rise 8 feet. It is high water about the same time as at Dover.

Cromarty Firth is entered between the North and South Sutors, Spring tides running at $1\frac{1}{2}$ knots, but abreast of Cromarty this rate is increased to 2 knots on the ebb. A yacht could bring up about 400 yards West of Cromarty Harbour in 3 fathoms, but there is better shelter to be found 4 miles further up at Invergordon Harbour, where a vessel drawing 5 feet can lie afloat on the East side.

The shoal on the North side of the fairway is marked by beacons. Beware of the numerous naval mooring buoys near Invergordon.

Spring tides rise 13 feet 7 inches. Neaps rise 10 feet 8 inches. For time of high water add 1 hour to H.W.D.

Caledonian Canal (see also Chapter IX for southern end) is 60 miles long, with 29 locks and is available for vessels up to 168 feet in length, 38 feet beam, and 14 feet draught. Enter via Inverness Firth. Let go anchor above the canal gates, row ashore and make inquiries. If the yacht has no engine, arrange to be towed either by canal tug or by any steam drifter which may be bound through. Small craft can enter the sea-lock at Clachnaharry at all states of the tide during Neaps; but during Springs from 2 hours before till 2 hours after high water. At Inverness there are shops for provisions. Have good ropes ready for checking the vessel's way when entering locks, especially if the wind is aft. A sea-anchor let go astern under such circumstances is useful. Efficient fendoffs are essential. With a fair wind, the Caledonian Canal can be negotiated even without the aid of mechanical power, or horse, for the freshwater locks are connected by cuttings that are fairly wide, but only easy sail will be requisite. The scenery is very beautiful. There is plenty of room in the canal locks, though the ingress and egress are tedious. The freshwater tanks could be filled whilst passing through Loch Ness.

At Inverness Spring tides rise 14 feet. Neaps rise 11 feet. For time of high water add 1 hour 5 minutes to H.W.D.

Lossiemouth. Yachts up to 5 feet draught can lie afloat, but this artificial harbour which is sheltered by breakwaters must not be approached during easterly or NE gales. At night, when it is dangerous to enter, a red light is shown above the green light at the end of the South Pier.

Spring tides rise 12 feet. Neaps rise 9 feet. For time of high water add 1 hour to H.W.D.

Buckie (Cluny Harbour) can be entered at all states of the tide by craft drawing 6 feet. Bring up in either No. 1, No. 2, or No. 3 Basin, but not in No. 4. Here will be found some of the Scotch herring drifters. All repairs to hull and engines available. Stores and motor fuel. The drifters have a draught of about 10 feet, and when there is less water than this amount at the entrance, a green fixed light is exhibited at the North breakwater. (Tides as at Lossiemouth.) **Port Knockie** is 4 miles NE of Buckie, and in this fishing port yachts up to 9 feet draught can enter at all states of the tide, but the disadvantage of these Moray Firth harbours is that they are dangerous to approach during NE gales. **Macduff** is entered on a $SE\frac{1}{2}S$ bearing, with the two red leading lights. Moor inside the harbour, where the bottom is soft mud and there is always $5\frac{1}{2}$ feet of water. But this is only a small harbour and an awkward corner has to be negotiated. Have a good warp ready for checking.

Fraserburgh is a convenient harbour when cruising, and most yachtsmen will prefer to cut straight across from Wick or St. Margaret's Hope, picking up the white light-house of Kinnaird Head, 120 feet high, which is quite close

to Fraserburgh. Especially will this be found convenient if compelled to wait for a tide, since the seas off Rattray Head when tide is opposed to wind are both steep and ugly for small craft. Yachts up to 7 feet draught can enter at all states of the tide, and every courtesy can be expected from the Harbour Master although there may be a whole fleet of drifters inside. A berth can be found in the Balaclava, or else the South Harbour. All stores, provisions, motor fuel, can be obtained; and there are reliable ship chandlers.

Spring tides rise $10\frac{1}{2}$ feet. Neaps rise 8 feet. For time of high water add $1\frac{1}{2}$ hours to H.W.D.

Peterhead is in process of becoming a fine harbour of refuge. It should not be attempted in easterly gales. Go into Port Henry Harbour, which is approached through the North or South Harbour, and is available to vessels under 6 feet draught at all tides. Some yachts prefer to anchor in South Bay behind the South breakwater, but do not get too close to obstructions. Otherwise there is deep water. All ship's stores procurable at the local chandlers'. Motor fuel and provisions obtainable.

Spring tides rise $11\frac{1}{2}$ feet. Neaps rise 9 feet. For time of high water add $1\frac{1}{4}$ hours to H.W.D.

Aberdeen Harbour. Pass between the North Pier and the South breakwater. Enter Victoria Dock by the southern entrance. Do not attempt this harbour during NE gales. If stopping only temporarily, with the wind off shore, let go in Aberdeen Roads with the South breakwater end on. Good holding ground in 4 fathoms.

Spring tides rise 12 feet 9 inches. Neaps rise 9 feet. For time of high water add $1\frac{3}{4}$ hours to H.W.D.

In fine weather, with wind off the land, there is a good anchorage in Stonehaven Bay. **Stonehaven Inner Harbour**

dries out, but craft drawing less than 5 feet can keep afloat in the Outer Harbour, though this is by no means an ideal berth during easterly winds. Use the lead.

Spring tides rise 14 feet. Neaps rise 11 feet. For time of high water add 2 hours to H.W.D.

Montrose Harbour has about 6 feet of water over the Bar at L.W. Springs, but the lead should be kept going as this depth cannot be guaranteed. The best time to enter is during the first hour of the flood. The tide runs very strongly, especially on the ebb, attaining a velocity of 6 knots and causing an ugly sea off the entrance as the stream emerges. Make for the wet dock entrance, or else go alongside the Fish Quay. The tendency for both this quay and the wet dock entrance to silt in some years necessitates up-to-date information and caution. At night when the gates are open, a red light is shown at the dock entrance. Montrose red leading lights in line bear W by N $\frac{1}{2}$ N.

Spring tides rise 15 $\frac{1}{2}$ feet. Neaps rise 12 $\frac{1}{2}$ feet. For time of high water add 2 $\frac{1}{2}$ hours to H.W.D.

Dundee. Pick up the spherical (black-and-white horizontal-striped) Tay Fairway bell buoy, which has an occulting light. The red conical buoys mark the edge of Gaa Spit on the North side of the Tay. Black can buoys are on the South. There is always plenty of water over the Bar, but do not run for this river during easterly gales. Anchor : (a) at Broughty Ferry ; (b) in Tayport ; (c) or else proceed up to Dundee, bringing up off the Tay Bridge railway station in 2 fathoms ; (d) enter one of the docks, e.g. the Fish Dock. Dundee, once famous for its whalers, can effect any repairs. All stores procurable.

Spring tides rise 15 $\frac{1}{2}$ feet. Neaps rise 12 $\frac{1}{2}$ feet. For time of high water add 3 $\frac{1}{2}$ hours to H.W.D.

Firth of Forth.

May Island, with its lighthouse (240 feet high), is a most important and valuable land mark when coming in from the sea, but the tides are strong and fogs are frequent. The light is visible for 21 miles, and there is a fog siren.

Anstruther Harbour entrance is open to the West. Both the outer and inner basins dry out for about 4 hours of each tide, but small craft are assigned a mud berth by the Harbour Master. Fresh water can be obtained from the quay hydrant ; motor fuel and provisions from the village. Spring tides rise 18 feet. Neaps rise 16 feet. For time of high water add 3 hours to H.W.D. This is a fishing port that is not often visited by yachts.

St. Monance Harbour dries out. This is an excellent place for repairs, and there is a good yard where numbers of fine yachts and other craft have been built. The rise and fall of tide approximate to those at Anstruther, but high water occurs about half an hour later. At night a red light is shown when the harbour is open ; a red light under green light when the harbour is closed. Small craft can always enter when only a green light is exhibited.

Methil lies at the NW side of Largo Bay. The harbour entrance is wide, easy, and has ample water for yachts. At tide time go into one of the wet docks as directed by the Harbour Master after the gates have opened. During fine weather there is temporary anchorage in Largo Bay. Spring tides rise 18 feet. Neaps rise $14\frac{1}{2}$ feet. For time of high water add $3\frac{1}{2}$ hours to H.W.D.

Kirkcaldy Harbour permits of a yacht, drawing no more than 4 feet, keeping afloat provided she goes alongside the East Pier where good protection is afforded from NE winds.

When entering this harbour, hug the East Pier. Easterly winds kick up a nasty, wet sea outside. If staying more than a tide, it is better to enter the wet dock which is open at tide time. As a broad principle, it is advisable to enter Kirkcaldy only after half flood, and not during easterly gales. At night a red light from the head of the West inner pier indicates that it is unsafe for vessels to approach. Spring tides rise 17 feet. Neaps rise 13 feet. For time of high water add $3\frac{1}{2}$ hours to H.W.D.

Inchkeith Island has a useful little harbour on its West side, practicable for small craft even during winter gales. The entrance is very narrow, between a rock and a reef. With westerly winds there is a nasty backwash, and it is a difficult place to take during thick weather. None the less, this tiny port is not to be despised. It is advisable to stow sail and enter under power at slow speed. Round the pier close to, and head up to the North alongside the pier, securing to the same during fine weather. If there is much surge lay out a kedge abeam of the ship eastward to keep her from hitting the quay. Available for craft drawing not more than 6 feet. There is drinking water on the island, but no supplies nearer than Leith. Even if permission has to be obtained from the military authorities, after arrival, this will be found a capital refuge when caught out in the middle of the Forth.

The Firth of Forth is well called by Dutchmen "The Devil's Blow Pipe," and the short, steep seas which soon get up, punish small craft; for the tides are strong. Much has been said about the grandeur of the Forth, which is impressive under all conditions—trying in thick weather, majestic in moonlight, glorious in its sunsets, and very striking with the towers of Edinburgh in the near distance and the Forth Bridge in silhouette.

Burntisland is easy of access between the piers. At tide time enter either the East or West Dock, where you will lie afloat. The harbour dries out, but there is temporary anchorage in Inverkeithing Bay. The docking signals are made from the flagstaff at the North side of the East Dock entrance. At night a green light signifies that the dock gates are closed, and green under red means that it is perilous to enter. But white under red orders you to enter the East Dock; 2 whites under red to enter the West Dock.

Spring tides rise 18 feet. Neaps rise $14\frac{1}{2}$ feet. For time of high water add $3\frac{1}{2}$ hours to H.W.D.

From Burntisland, where most stores are procurable, it is possible to reach **Aberdour** by a picturesque walk, or by 'bus. **Aberdour Harbour** is well sheltered from the West, but dries out.

Leith is too concerned with commercial shipping to be recommended for yachts, though all repairs and every kind of stores can be procured. Granton is quite close, and equally convenient for yachtsmen who wish to visit Edinburgh.

Granton is a well-known base for North Sea steam trawlers, and as the headquarters of the Royal Forth Yacht Club. The entrance is wide, and the harbour extensive, but watch the tides. If possible, pick up a mooring. Every kind of stores procurable. Repairs possible. Edinburgh can be reached by tram.

Spring tides rise $17\frac{1}{2}$ feet. Neaps rise 14 feet. For time of high water add $3\frac{1}{2}$ hours to H.W.D.

Grangemouth is connected with the Firth of Forth by means of the Carron River, most of which dries at low water Springs. It is at Grangemouth that the Forth and Clyde Canal is entered.

After proceeding from Granton under the Forth Bridge (147 feet high), and passing the Beamer Rock light beacon, the Tancred Bank black can (light) buoy and the Dod's Bank light buoy (can with cylindrical topmark), reach the entrance to the Carron River and wait for sufficient rise of tide, i.e. until half flood. The Carron River has 3 miles of bewildering mud banks, with a twisting channel and sunken breakwater, which require local knowledge, but a pilot can be obtained for the sum of 12/6. Enter the sea-lock at Grangemouth any time between four hours flood and half ebb. Lie in the basin, pay the canal dues, and be prepared for the inevitable coal dust. Steps should now be taken for protecting the yacht's sides either by sacks stuffed with straw, or by old pneumatic tyres. A drogue, or sea-anchor, will be found useful as in the Caledonian Canal if carrying too much way during a fresh breeze.

The Forth and Clyde Canal is 35 miles long, with 39 locks, available for vessels up to 70 feet long, 18 feet beam, and 8 feet draught, but there are numerous swing bridges.

(See also the Forth and Clyde Canal in Chapter IX.)

At Grangemouth Spring tides rise $18\frac{1}{2}$ feet. Neaps rise 14 feet 9 inches. For time of high water add 4 hours to H.W.D.

CHAPTER XI

(FOREIGN SECTION. PART I)

YMUIDEN TO THE CHANNEL ISLANDS

Ymuiden is distant just over 100 miles from Lowestoft, and is a convenient harbour when bound between England and the Kiel Canal. Although there is a great sameness of the sandy Dutch coast North from Scheveningen, Ymuiden is readily distinguishable by its projecting moles in the foreground as well as by the towers and buildings in the background. The entrance is not difficult, and is 300 yards wide. The outer harbour is enclosed by the North and South Moles. At the seaward end of the former is exhibited a fixed red light ; at the seaward end of the South Mole is a fixed green light. Pass between these two, after which will be seen five black can buoys, which will be left to port, and five red conical buoys, which will be left to starboard. The three locks will then be observed to the eastward. Of these Lock A is the biggest, and Lock C (the southernmost) is the smallest. Access is thus obtained to the North Sea Canal, which at length after 13 miles brings you to Amsterdam. There is ample water for any yacht, and the canal is wide enough to allow small craft to tack. A canal pilot is quite unnecessary, and there is no current, but there are the Velsen and Hembrug bridges which open.

It is necessary to watch the set of tide which sweeps past the mouth of the outer harbour by the North and South Moles, especially when the stream is flooding, i.e. setting to the North. Plenty of way should therefore be carried till well inside the Moles. In bad weather, especially with a

SW gale against the ebb, there is a dangerous sea at this entrance. In fine weather, if stopping only for a few hours, a small vessel may anchor in the Outer Harbour but clear of the fairway. This anchorage cannot be recommended, and at least one yacht has been blown ashore after dragging, and become a casualty. In all weathers there is, however, a good berth by the dolphins on the South side of the channel immediately before reaching Lock C. If there is a bigger vessel, such as a tug or dredger secured between the dolphins, so much the better. Make fast alongside her.

Otherwise, if not wishing to go through into the canal, a berth may be chosen in the Haringhaven, or the Vischershaven, where as much as $2\frac{1}{2}$ fathoms can be found. Many visiting yachtsmen will prefer this. There are ship chandlers adjacent. Supplies from the town. Spring tides rise only 6 feet 7 inches. Neaps rise 1 foot less. For time of high water add $3\frac{1}{2}$ hours to H.W.D. Whilst passing through the lock have ship's papers ready for the Customs Officer.

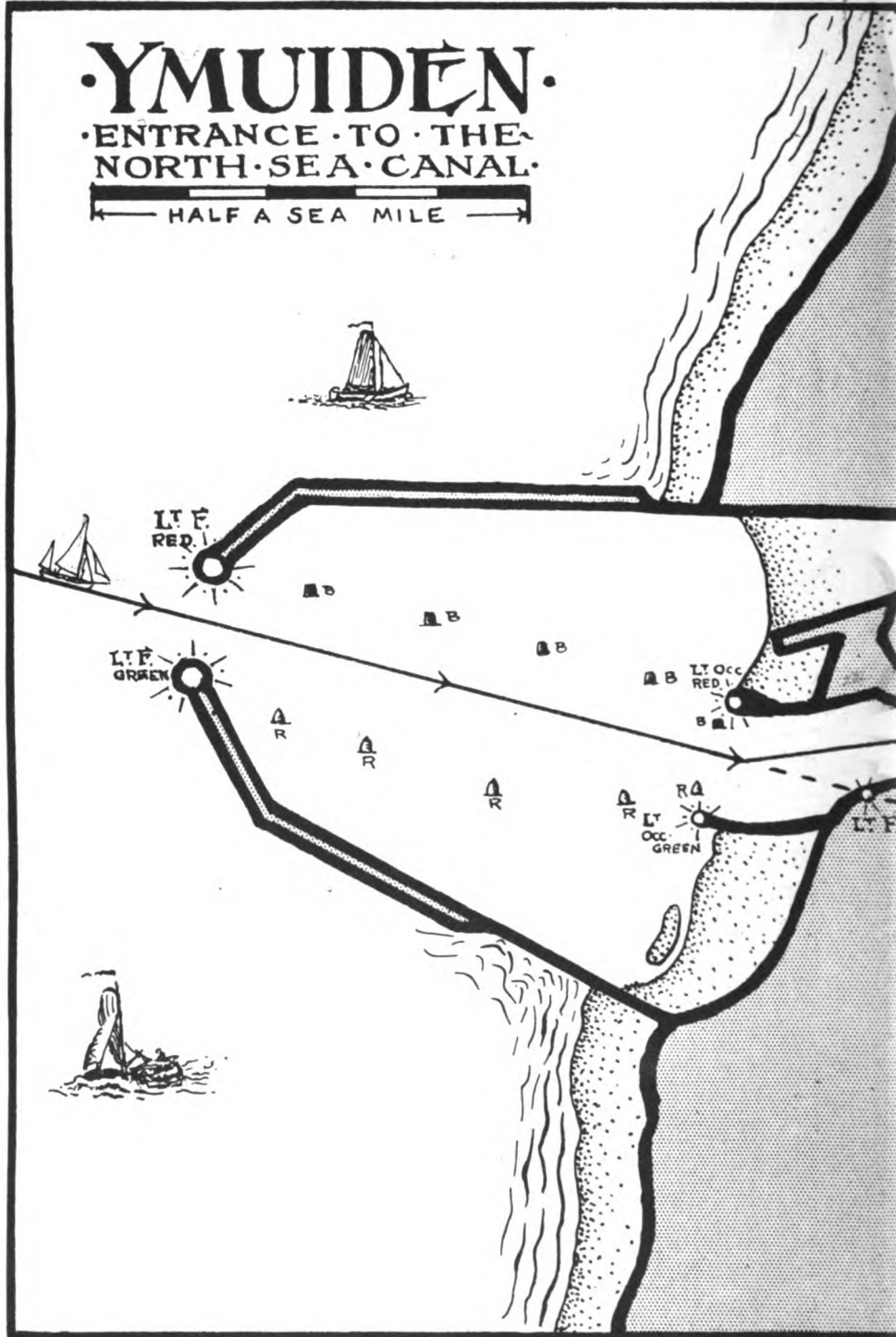
At **Amsterdam** the best place where to bring up is in the Yacht Haven on the North side of the Ij, opposite the railway station. Cross by one of the ferries. There is a certain amount of smell in the Ij caused by the churning up of the mud by steamers' wash. Entrance to the Zuyder Zee is obtained through the Orange Locks. There are excellent yacht yards in the Amsterdam neighbourhood. All supplies and repairs procurable. By means of the inland waterways it is possible to reach Flushing, and this may be found of great convenience during a spell of bad weather provided the yacht draws not more than 5 feet.

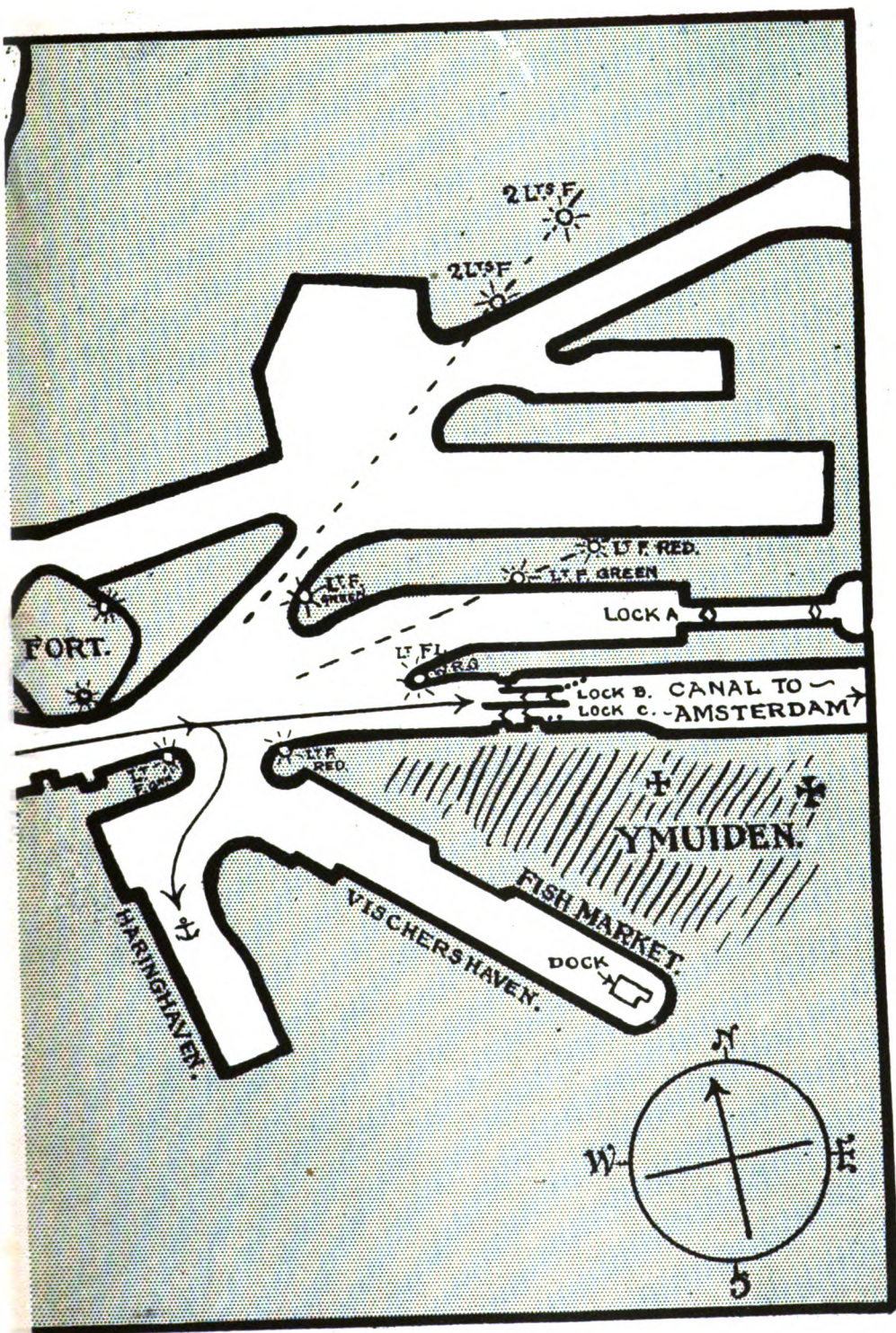
Scheveningen is easily recognized by its hotels, promenade pier, and (in summer) by the large number of people on the sandy beach. The kurhaus and the water tower are prominent features. The harbour cannot be recommended

YMUIDEN.

ENTRANCE TO THE
NORTH-SEA CANAL.

— HALF A SEA MILE —





unconditionally. It should never be attempted during bad weather, especially with onshore winds.

The Outer Harbour is entered between two piers, and you then turn to port to reach the Inner Harbour, which is not free from swell if there is a fresh breeze outside. Only shallow draught vessels should make use of Scheveningen. Normally there should be $4\frac{1}{2}$ feet at low water Springs, but this cannot be relied upon and gales may alter the depth at any time. There is a decided Bar at the mouth. Sometimes the best water will be found near the northern pier. Tide signals are shown near the inner end of that pier: one ball indicates a depth of $3\frac{1}{2}$ feet, but one cone denotes another 8 inches. Thus 3 horizontal balls hoisted above 2 cones would indicate that there was a depth of at least 11 feet. When the depth is less than 4 feet, a white square flag is hoisted. In case of urgency, it would be a reasonable risk to assume there is a foot more water than the signals indicate; and indeed this risk has been undertaken with no disaster. Dutch fishing craft use this harbour, but the swell inside is bad enough to snap warps. If entering under sail, be ready to lower away quickly, as you come to a cul-de-sac after turning to port.

Spring tides rise $6\frac{1}{2}$ feet. Neaps rise $5\frac{1}{2}$ feet. For time of high water add $3\frac{1}{4}$ hours to H.W.D.

Scheveningen is a popular summer resort, and within easy reach of The Hague.

Hook of Holland. This is an inhospitable coast, and dangerous during thick weather or westerly gales, as previous disasters have proved. If coming across the North Sea from England, make for the Maas lightship (which has 2 masts and the lettering MAA^s on her hull), and thence lay a course for the Hook. The entrance of what is called The New Rotterdam Canal is between the North and South breakwaters. These may be submerged at certain times, but are

marked by beacons surmounted, on the North side by balls and on the South side by cones. To seaward of the North breakwater there is a light and whistle buoy. On the South side approach there is a red conical buoy with staff and globe, which will be left to starboard when entering. The leading lights are on the North side, inshore. Watch the set of tide, which is irregular but strong, attaining a velocity of 5 knots at Springs, and keep clear of considerable traffic. The channel up to Rotterdam is excellently marked. Leave red conical buoys to starboard, and black can buoys to port. Entrance should be made on the flood. A fresh SW wind against the ebb kicks up a nasty sea.

Proceeding up to Rotterdam is in some respects akin to coming up the Thames to London Bridge. The hot tide and amount of traffic of all sorts and sizes, make this waterway not desirable for yachts. But there is a good berth on the North side, in the Jachthaven, where small craft will lie secure.

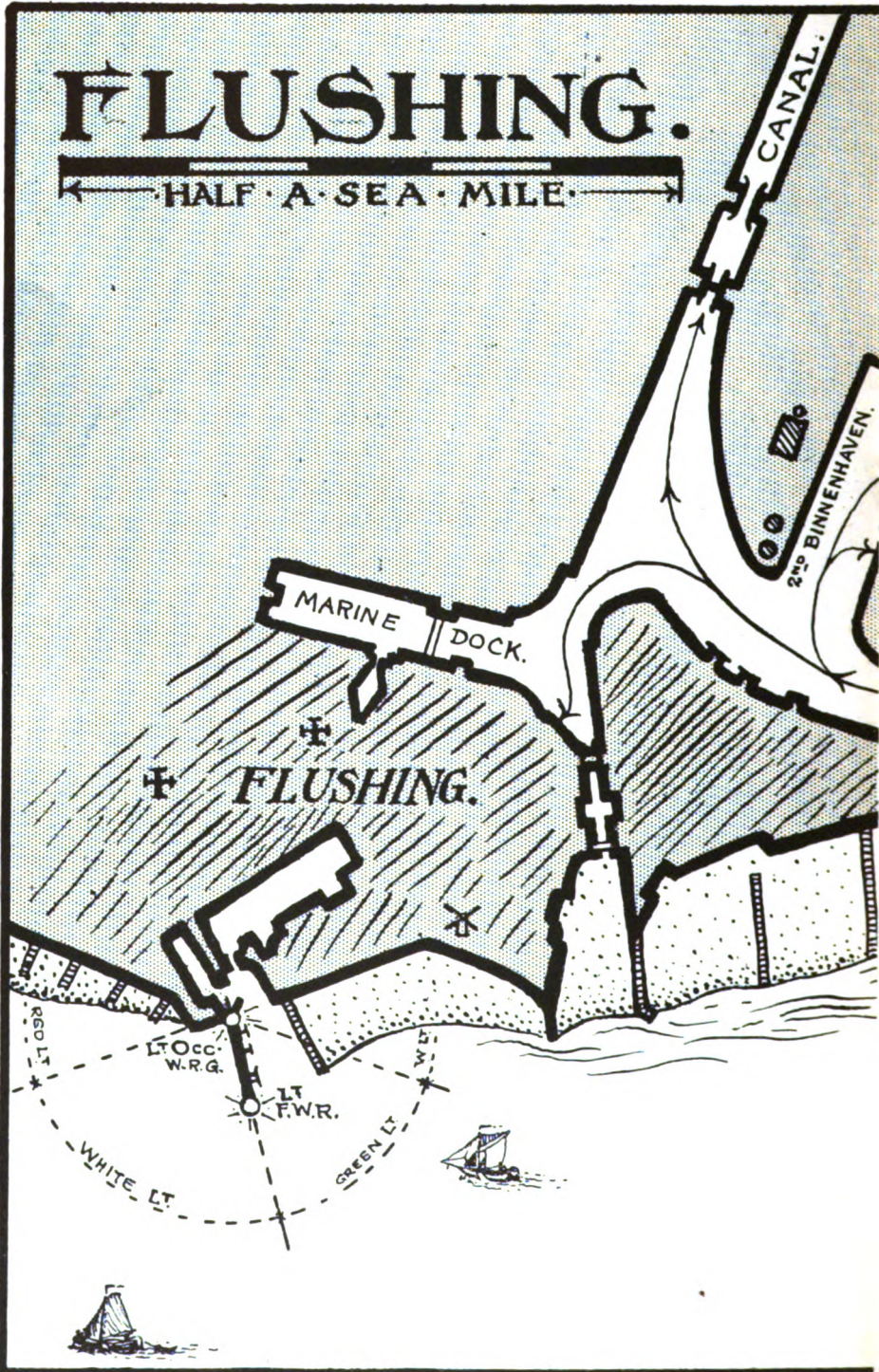
If intending to stop only a tide or two, it is neither necessary nor advisable to go all the way up to Rotterdam. Small yachts drawing not more than about 8 to 10 feet will find at The Hook an excellent little harbour known as **Berghaven**. This is on the North side and is perfectly safe, though there will be a certain amount of motion if it is blowing hard outside. Small tugs find it convenient to berth here. But, owing to the strong tide which sweeps past its narrow entrance, and the narrowness of its mouth, considerable care is requisite. Auxiliary craft will prefer to lower sail and enter under power.

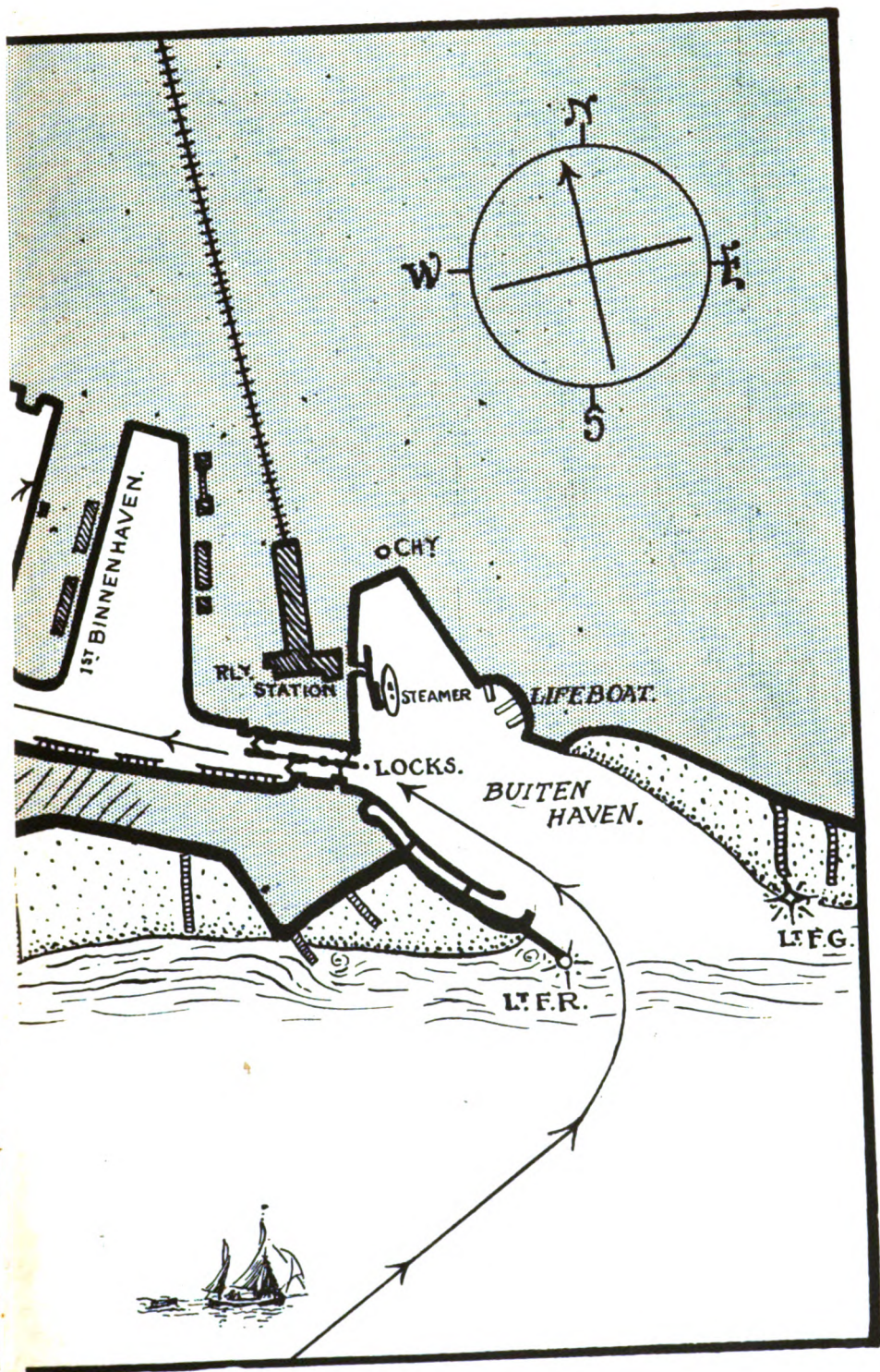
At the Hook of Holland Spring tides rise 6 feet 8 inches. Neaps rise 1 foot less. For time of high water add 3 hours to H.W.D.

Flushing is the southern gateway to the inland waters of Holland. When coming up from the SW, a stranger

FLUSHING.

← HALF · A · SEA · MILE · →





may at first have a little difficulty in locating the entrance, and be confused by the plan on his chart, which shows three apparent entrances : " Commercial Port," " Marine Port," and " Outer Harbour." The first two are to be ignored, but make for the latter, which is the easternmost. Steer for a dark clump of trees, and you will pick up from the low-lying land such objects as spires and towers, together with evidence of a large shipyard. The River Scheldt here is nearly 4 miles wide, and the tide is very strong, so that small sailing yachts will allow an additional point, when crossing, to counteract the current. In entering the Outer Harbour watch the set of tide past the mouth, but there 'is' slack water as soon as you get inside. Here berth temporarily on the port hand, by securing alongside a tug or other craft which is usually tied up to the jetty. The mail steamer berths at the North side of the harbour as shown in the accompanying Plan. There is always ample water. At the western side will be seen the lock gates. If closed, this will be indicated by a red basket globe. A white globe indicates that they are open. Go through the lock and select one of the two following berths : either in No. 2 Binnenhaven, or carry straight on till you come to the first turn on the *port* hand, then bear round well to port (avoiding the Marine Dock) and secure alongside the quay or some other vessel. This can be recommended as away from all traffic, and very handy for the Post Office, shops, and restaurants. The only drawback is that inquisitiveness of the populace which is general throughout Holland. Do not bring up immediately after emerging from the Flushing lock, for there is too much coming and going of local vessels. Have fendoffs, lines, and boat-hook ready. Whilst the yacht is still in the lock, the owner will be invited to climb ashore up the iron ladder and give all particulars to the sluis-meester. Yachts are very rarely troubled here by the Customs Officers. All stores and repairs procurable. Drinking water should be boiled.

Spring tides rise 15 feet 4 inches. Neaps rise 12 feet 8 inches. For time of high water add 3 hours to H.W.D.

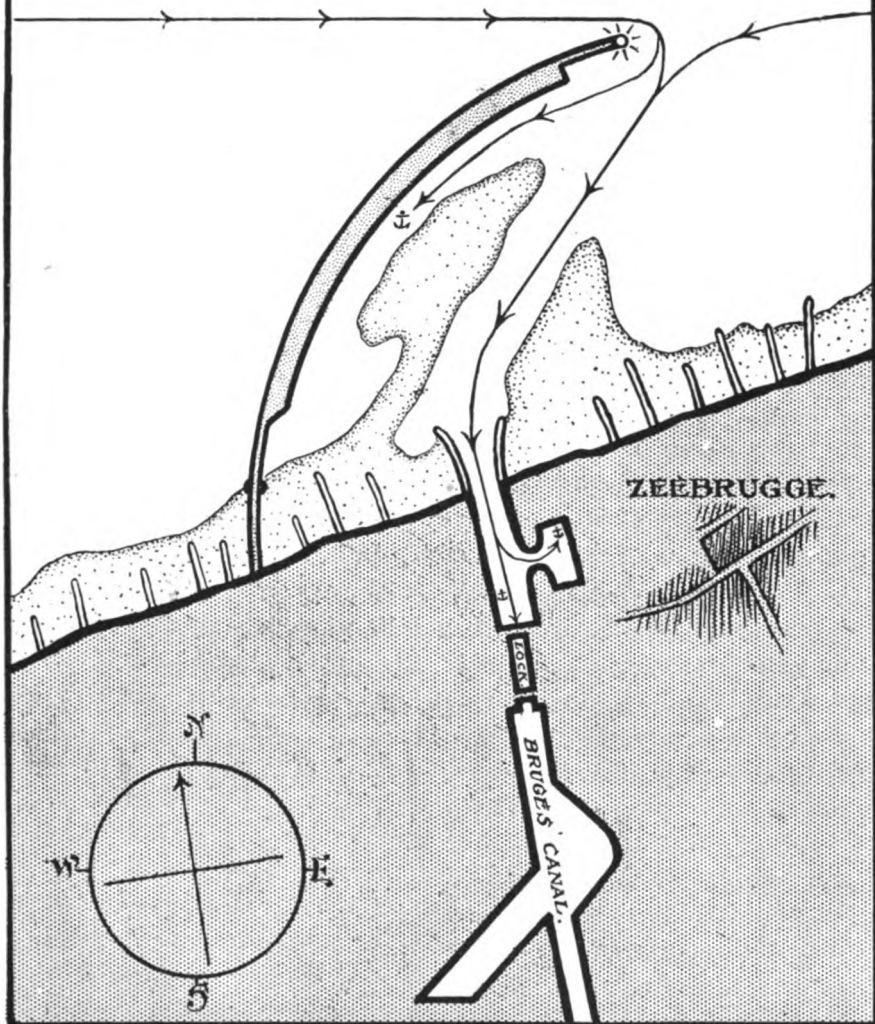
Zeebrugge is protected from the North through West to SW by a curved mole, which is $1\frac{1}{4}$ miles in extent. At the seaward end of the mole is a conspicuous white lighthouse, 87 feet high, with an occulting red light. The harbour, strictly reckoning, consists of four portions. (1) The outer harbour created by the curved mole; (2) the somewhat narrow approach to the lock; (3) the Bassin d'Echouage which goes out of this approach on the eastern side; (4) the Bruges Canal, which is entered through the lock.

The entrance to (1) is quite easy, but it is necessary already to have decided upon the anchorage. If the weather is calm and settled and the visit is only brief, steer sharp round the end of the mole, follow the latter quite closely (to avoid the off-lying shoal) and bring up as shown in the accompanying Plan either alongside the mole, or (if there is too much swell) with anchor ahead and stern line on to the mole, though not in such a manner as will obstruct the fairway, which at this spot is narrow. If there is much wind or sea outside, it is better to make for the approach to the lock, for which reason, having rounded the mole lighthouse, steer SW by South, avoiding the shoals to port and starboard, and go between the two pierheads of the canal approach. A snug berth will be found by the dolphins, but haul well in out of the traffic fairway. It was just short of these two pierheads that H.M.S. *Thetis* on the historic night in April 1918, sank herself, the wreck at a later date being shifted a little to the westward. The other two blockships, *Iphigenia* and *Intrepid*, were sunk further within but have since been removed.

The Bassin d'Echouage on the port hand is sheltered from all winds and sea, but is a somewhat dreary place. The depth is not to be relied upon, and at dead low water Springs,

• ZEEBRUGGE HARBOUR •

0 1 2 3 4 5 6 7 8 9 10 CABLES
ONE SEA MILE.



not more than 3 feet may be found, but the bottom is soft mud and no harm will arise. Go alongside the eastern quay, make fast, and give the ship a slight list towards the shore. At the NE corner of this Bassin, alongside the staging, there is a pool which has between 4 and 5 feet of water. Fishing craft come in here.

If proceeding through the lock into Bruges Canal, there is an excellent berth about 3 cables distance after emerging. Ordinary supplies obtainable, but drinking water should be boiled. Bruges, which was the headquarters of the German Flanders Submarine Flotilla during the War, is only 6 miles further up the canal.

Spring tides rise 14 feet 9 inches. Neaps rise 11 feet 8 inches. For time of high water add $1\frac{1}{2}$ hours H.W.D.

Blankenberghe from the sea will be recognized as a typical Continental seaside resort, with hotels, plage, and bathers. The small harbour is a miniature Ostende. Enter between the two piers, of which the eastern head has a fixed red light, and the western a fixed green light. Only small craft should use this harbour, and then not till after sufficient rise of tide. At half flood there should be 8 feet on the Bar. By day when a square blue flag is hoisted on the eastern pierhead you may know that there is a depth of at least 9 feet on the Bar. Bring up in the wet dock, which has 14 feet. This harbour should not be attempted during hard onshore winds.

Tides approximately as at Zeebrugge. Provisions, drinking water, and motor fuel obtainable.

Ostende entrance is between two open wooden piers projecting at right angles to the beach. A depth of $2\frac{1}{2}$ fathoms can be relied upon at low water Springs, but the tidal stream sets strongly athwart the mouth. Vessels under sail, if small, must especially counteract this: as soon as they get within the piers, their sails are blanketed. Not

infrequently there is a dredger at work, just in the entrance, anchored. To steer clear of her, notice how she has hoisted a black ball, and then pass her on the *opposite* side.

Carry on straight up the harbour. Do not turn into any of the basins, and avoid being tempted into either the Fish Basin or through a lock further up on the starboard hand and so into a bigger basin. Whilst the latter in itself is comfortable when once in, there is the nuisance of the lock. This means waiting amid bad smells and being tightly jambed up among other craft till the gates are open, necessitating the use of fendoffs and risk to a yacht's paint. There is also too much officialism before departure is permitted.

The approach to this lock is indicated on the accompanying Plan.

Far better will be found the berth off the yacht club. Instead of turning to starboard, continue till you see the club building on the port hand. Either let go anchor just to the NW thereof or—more conveniently—make fast fore and aft between the mooring posts which have been placed for that purpose abreast of the club house. Here you will lie in perfect security and comfort, with no restrictions as to your departure. It is possible here to give the ship a scrub, whilst all stores (including ropes and motor fuel) together with repairs are procurable. Drinking water from the club, where also you can land.

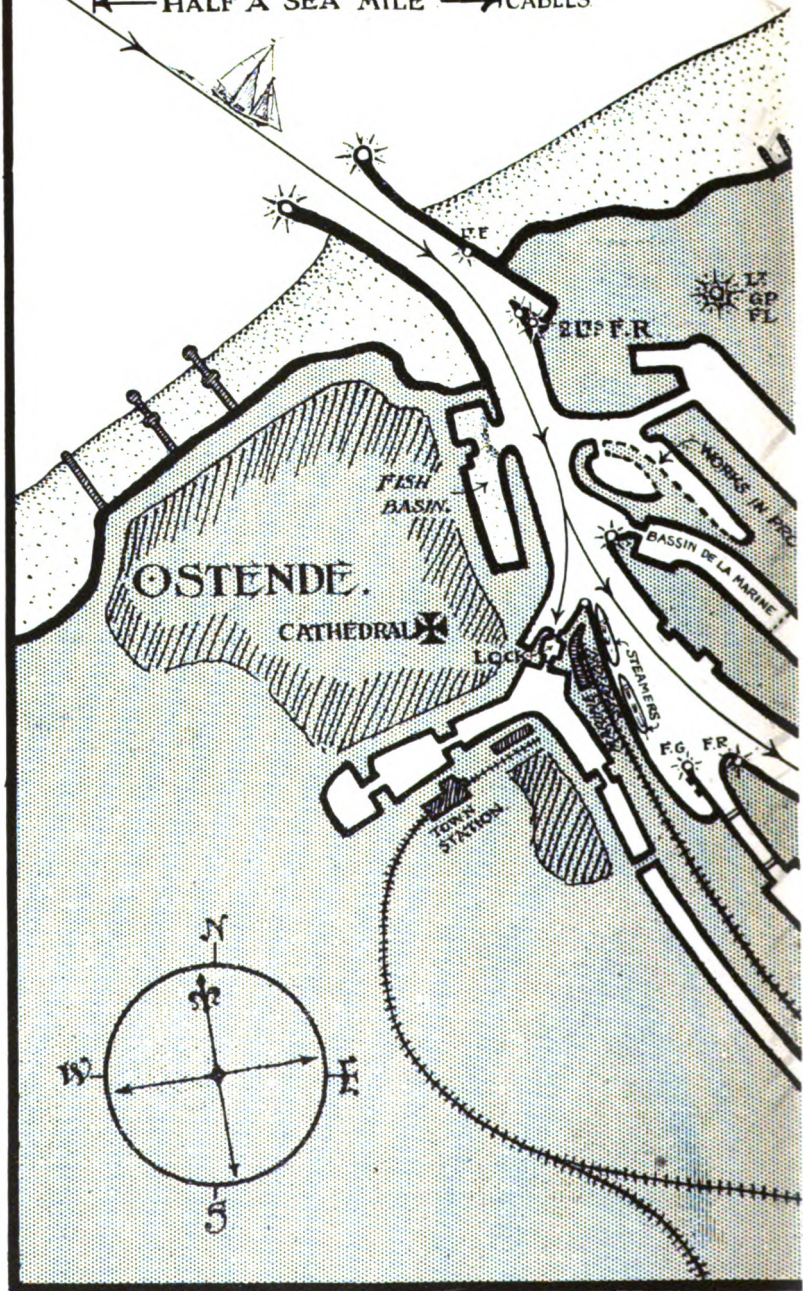
Spring tides rise 14 feet 10 inches. Neaps rise 11 feet 9 inches. For time of high water add 1 hour to H.W.D.

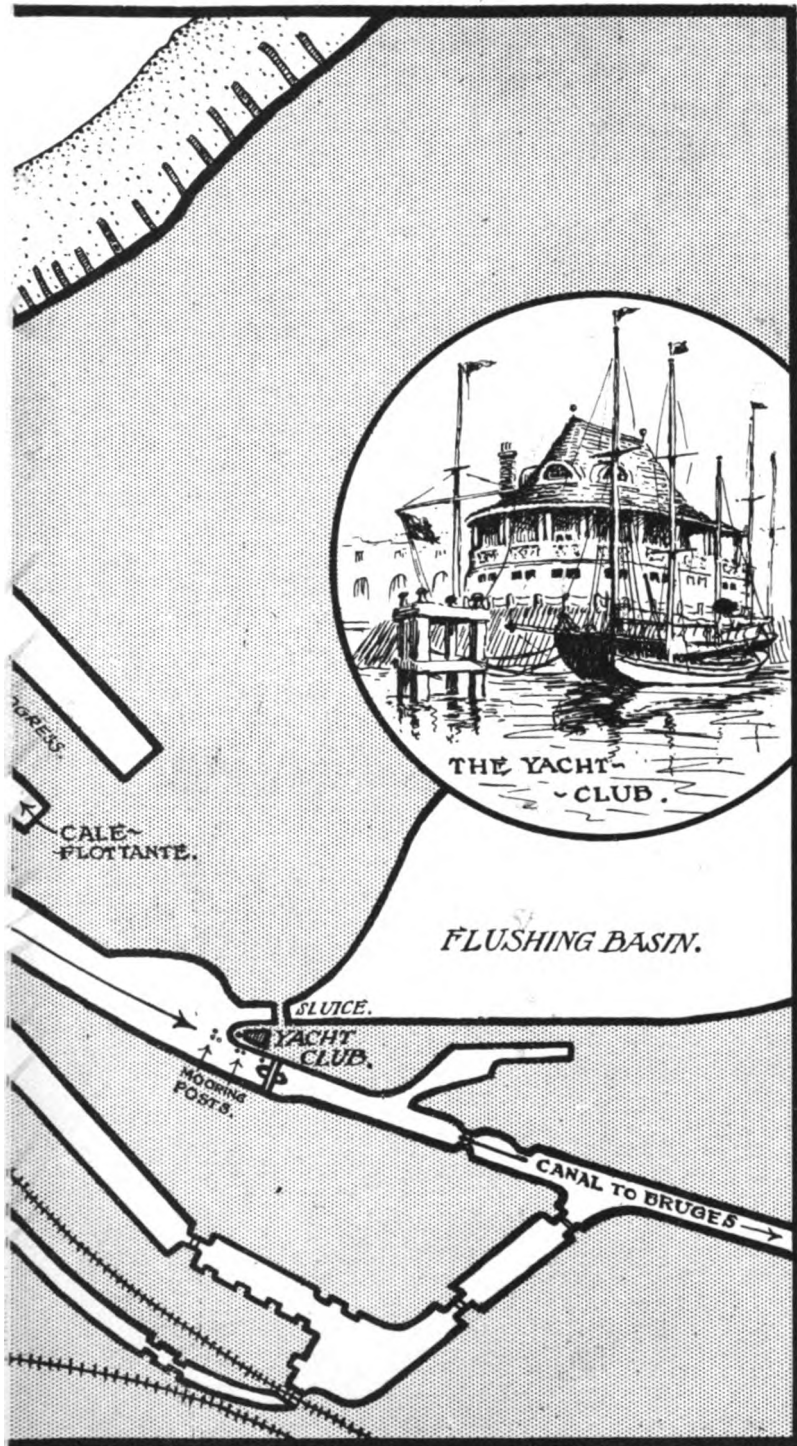
In hazy weather, when entering or leaving, be on the alert for the mail steamers.

Nieuport is approached by a very narrow channel, and the Bar has not more than 1 foot of water at L.W. Springs. Enter between the two piers, the best time being at half flood, and keep in the fairway close to the dolphins. When a blue pennant is hoisted at the signal station on the West

• ✦ OSTENDE. ✦ •

← HALF A SEA MILE → CABLES





side inshore there is a depth of 5 feet in the harbour. A blue square flag indicates 8 feet. The first half of the ebb runs strongly. Only shallow draught craft should use this harbour ; and be prepared to take the ground. The town was wiped out during the War but has been rebuilt. Provisions and petrol available.

Spring tides rise 16 feet. Neaps rise 13 feet. For time of high water add 50 minutes to H.W.D. In fine weather there is good anchorage in the roadstead off the entrance.

Dunkerque. The best time to enter is at about 2 hours before high water. The East-going, or flood stream runs at its strongest at half hour before high water, when it is necessary to hug the western pier till well inside. Enter between the two pier heads, where there is a depth of never less than 2 fathoms. Stand straight up harbour till you come to a bay on the port hand off a shipbuilding yard, but avoid getting too far in where the water shoals. Land in the dinghy at the steps. In ordinary weather this anchorage is satisfactory, and convenient for getting under way. During southerly gales a small yacht will roll, and the holding ground is not of the best in hard winds. Under such circumstances the only thing is to be locked into the basin to enjoy a quiet night.

All stores, fuel, and repairs procurable.

Spring tides rise 19 feet. Neaps rise 16 feet. For time of high water add 45 minutes to H.W.D.

Calais. The approach to Calais Harbour is well portrayed in the accompanying sketch and Plan. The tall white lighthouse (190 feet high) at the eastern side of the town rises up as a most prominent object. The tides off the entrance are strong, and there is generally a confused sea, though northerly winds create the worst fuss. Enter between the two pierheads, the best time being at either

2 hours before or 2 hours after high water. At H.W. Springs the stream sets eastward across the mouth at 3 and even 4 knots : it is, therefore, necessary to hug the western pier quite close, but be alert for mail steamers and other traffic. When once inside there is practically no tide. At Neaps the stream across the mouth has a velocity of about 1 knot. Perhaps the worst conditions would be during a NE gale, Spring tides, when the East-going tide is running at its hottest. Under these conditions it would be really dangerous for any small craft, though during a similar gale from the SW there is so much shelter from the land as to eliminate risk.

Proceed straight up the harbour, and bring up on the SW side at the top ; that is to say, opposite to the railway station and mail steamer wharf. If the wind comes northerly, this is an uncomfortable berth. If stopping more than a tide, it is far better to enter the lock gates and go into the Bassin Carnot. Then turn sharp to starboard and bring up against the quay or other vessel in the SW corner. Here there is perfect shelter in all weathers, but the lock gates open only from $2\frac{1}{2}$ hours before till 2 hours after high water.

Repairs, stores, and fuel are all available. When desirous of leaving the Bassin, call on the Capitaine du Port.

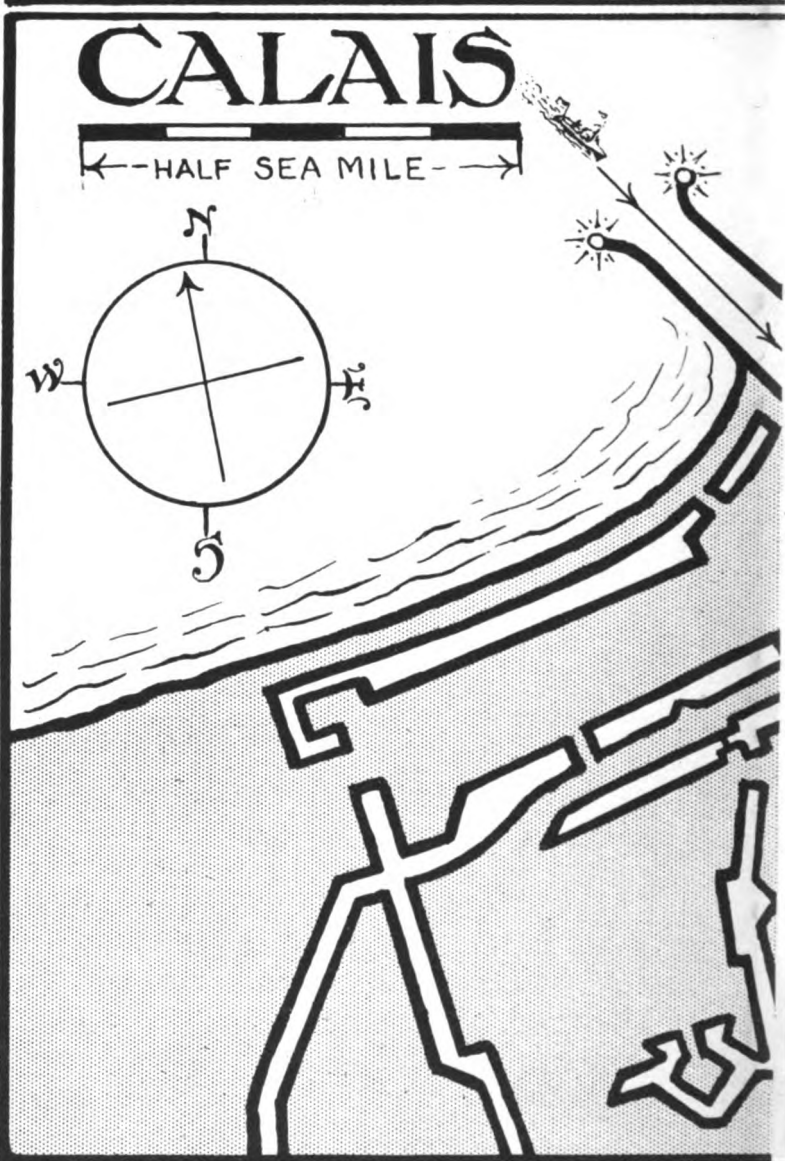
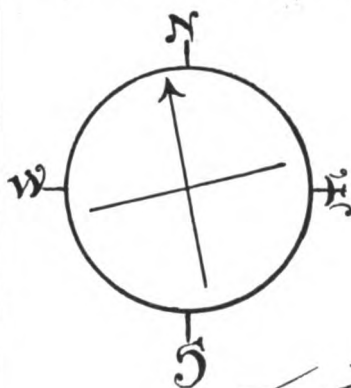
Spring tides rise $22\frac{1}{2}$ feet. Neaps rise 19 feet. For time of high water add 25 minutes to H.W.D.

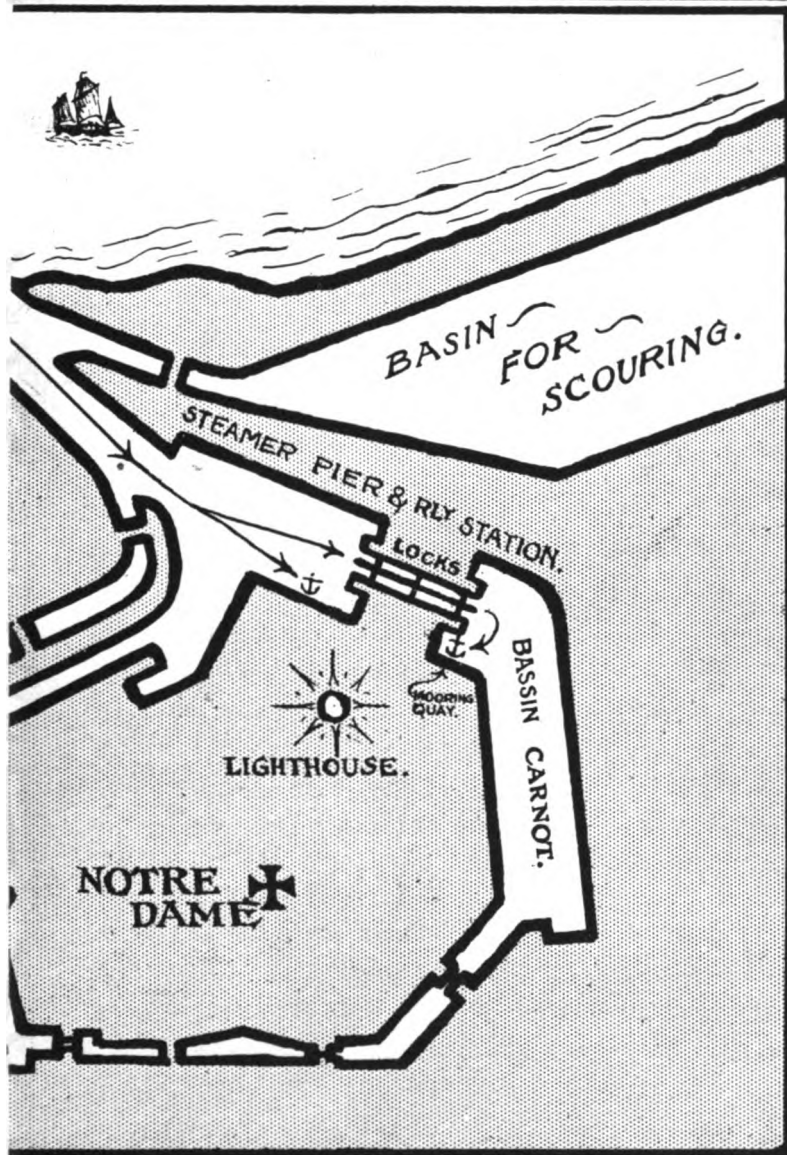
Boulogne. To enter, first pass through the Outer Harbour which is sheltered from SW winds by the Carnot breakwater. Leave to starboard the red conical buoy marking the NE limit of this breakwater : the buoy has a fixed green light. Now carry on in a SE direction between the two jetties, the channel here being about 100 yards wide and 16 feet deep. The leading marks are the spire of St. Nicolas in line with the light column (fixed red light) on the Quai Gambetta. During a NW gale Boulogne is dangerous of



CALAIS

← - HALF SEA MILE - →





entrance for small craft. Berth in the Bassin Loubet, where vessels discharge their cargoes. Otherwise go through the lock into the Bassin à Flot, which is used for vessels under repair as well as by fishing craft. The disadvantage of this wet dock is in the dirtiness of the water. The cleanest berth will be found within the Inner Harbour, though dust blows off the quays. The lock gates in Boulogne are generally open from at least 1 hour before until 15 minutes after high water.

All repairs and stores procurable. Spring tides rise 28 feet 9 inches. Neaps rise 13 feet. The time of high water practically synchronizes with that of Dover.

Etaples. To attempt this place is to embark on a risky adventure, and anyone who tried to enter at night or in bad weather out of deliberate choice would be lucky to emerge alive. Ordinarily it cannot attract yachtsmen, for the dangers and inconvenience entirely outweigh the value of its quaint simplicity and natural attractiveness ashore. But a craft of the barge type, or a Dutch type of yacht, of shallow draught and able to take the ground would be quite suitable. An auxiliary motor is necessary because of : (1) the short period during which there is enough water to cover the distance inside, and (2) the strength of the tidal current. The charts are inadequate, and there are two pilots at Etaples but these will not come off when the weather is bad. Under the circumstances it is better to ignore Etaples altogether, or ship a pilot at Boulogne and wait till fine settled weather during Neaps.

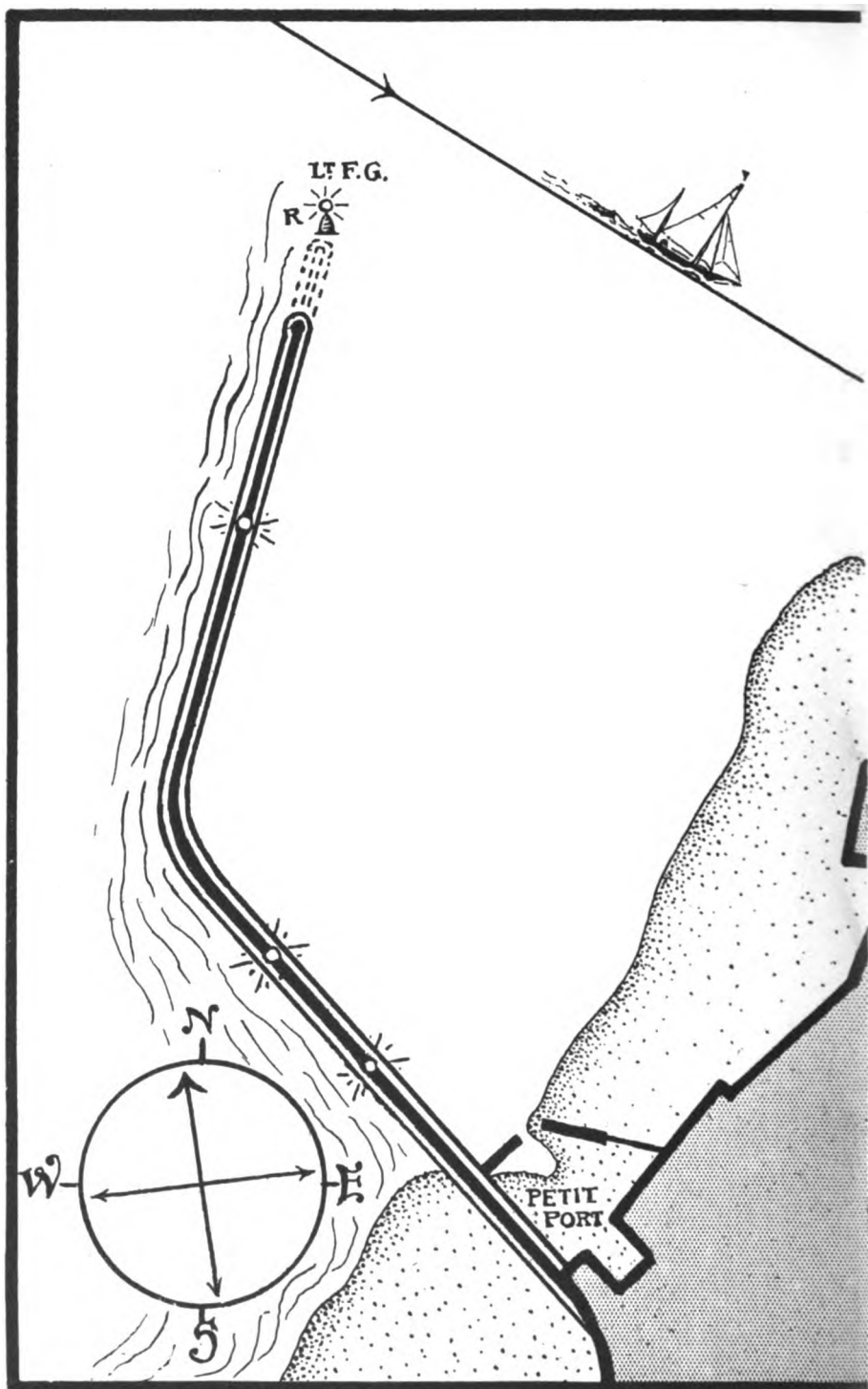
The Canche River flows out between Point du Touquet on the South and Point de Lornel on the North. The little fishing port of Etaples lies 2 miles inland, SE of Point du Touquet. The river mouth, where it meets the English Channel, is one vast expanse of sand which dries several feet at low water and extends for more than a mile seawards,

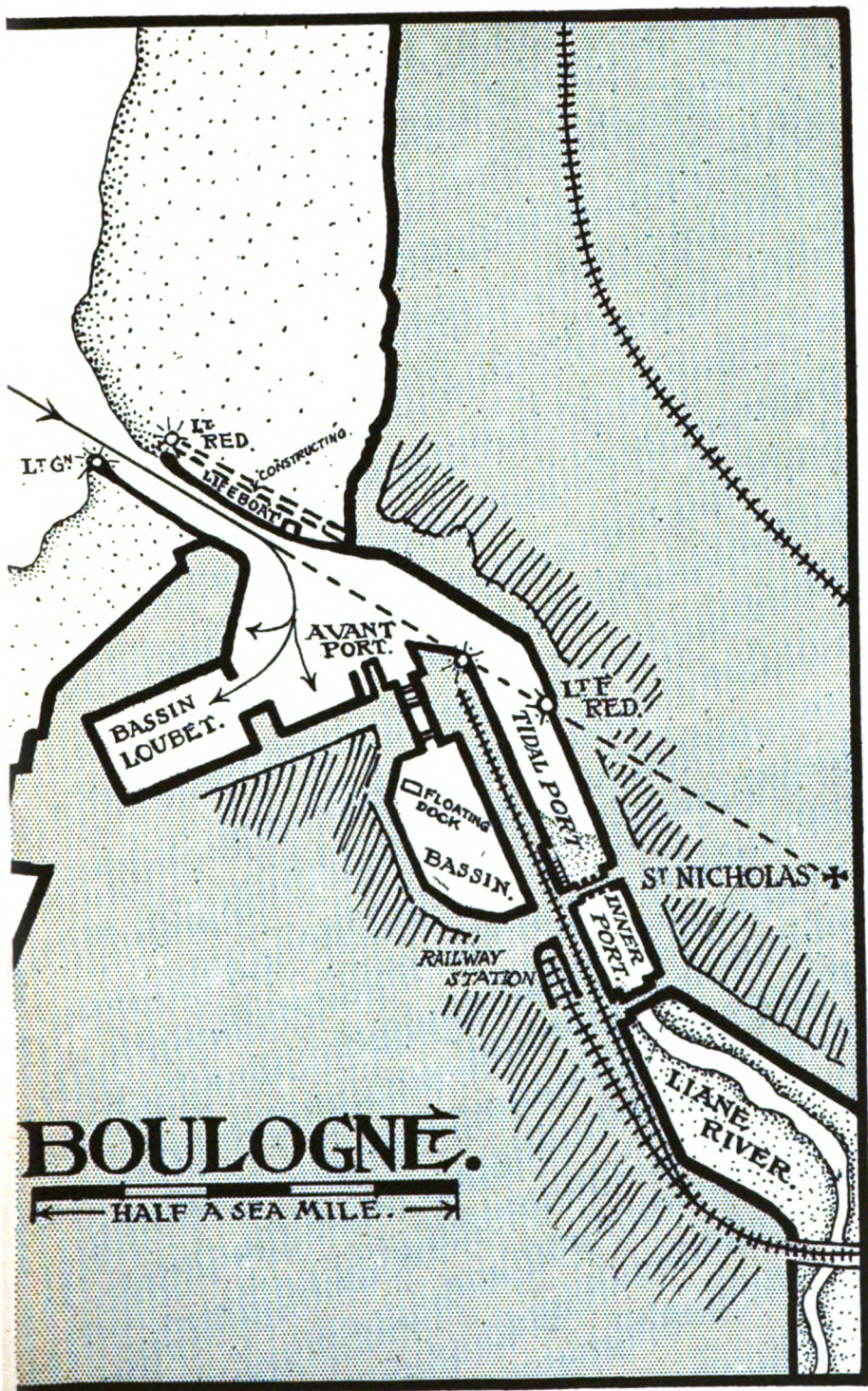
but the limits of these dangerous shallows are subject to variation. The tide does not reach Etaples until $1\frac{1}{2}$ hours before high water, and rushes out in about 3 hours. The approach to this mouth is marked by two buoys ; that at the North is a black spindle, lying approximately 2 miles NW of the concrete light column (26 feet high) on Point du Touquet. The southern buoy is painted red and has a bell. It is moored about 2 miles West of Point du Touquet. The position of neither buoy can be implicitly relied upon.

When coming from Boulogne, arrive off the North buoy at about half an hour before high water, and if there is not much sea or haze now enter midway between the above-mentioned two outer buoys. To the eastward, situated on the sandhills at the northern side of the river is the white, square Camiers Lighthouse, 56 feet high, which shows a red light over the banks and a white light over the best water. While it must be emphasized that the shifty character of the sands makes any directions incomplete, yet by using the lead frequently, watching the set of tide, and bringing the Camiers Lighthouse to bear about East, it is probable that the worst shoals will be avoided. Now keep a smart lookout for the river buoys (which are altered as requisite to meet the changes) and pick up the red buoy marking the North end of Point du Touquet, where the sea will probably be breaking. The tide runs at about 5 knots, so that if a yacht should get ashore the consequences might be serious.

Leave all red buoys to starboard, and the black ones to port, and you will now see the channel quite easily, being conspicuously marked by beacon poles on either side : those to starboard having conical topmarks, and those to port having cylindrical topmarks. Either bring up alongside the quay at Etaples, where you will dry out, or else follow the example of the local fishermen and dry out on the sands.

Very few supplies available.





The rise and fall of tide and the time of high water at the mouth of the Canche, correspond with those at Boulogne.

St. Valery-sur-Somme. The entrance to the Somme has more than one characteristic in common with the entrance to the Canche. In both cases there is an extensive bay of sand which dries out for a long period, and the tides are also strong. The seaward extremity is likewise marked by two buoys. The wind against tide sets up a nasty steep sea. The coast is low and difficult to discern in hazy weather. The Somme, like the Canche, should not be entered except with the assistance of a pilot, but the following directions are available for those who care to take the risk in a vessel of shallow draught. The chart is inadequate, and the sands alter, but the buoys are shifted to meet the changes. It is the position of these and a careful use of the lead that will be the best guides. The tides have a velocity of 7 knots at Springs, and set across the banks.

The most prudent procedure is as follows. When coming from the North pick up Point St. Quentin, which is a Coast-guard Station. Keep well away from this shore, and carry on across past Somme bay in a SSW direction, and the northernmost bell buoy (painted black), marking the entrance to the NW channel, will be sighted. By keeping to the West of this—but watch carefully the set of tide—you will be clear of the sands which dry out. Further to the South, off Cayeux, is another bell buoy (boat-shaped) but painted red and black. By keeping West of an imaginary line joining these two buoys, there is no danger of striking the shoals. Both the NW channel and the SW channel are well marked by buoys (red to starboard, black to port) and easy to follow. Those of the NW channel have on them the letter B and a numeral: those of the SW channel have the letter A and a numeral. Thus make for Point Hourdel and enter the little harbour at sufficient rise of tide, by keeping close along the

shingle bank as you round the point, which is here steep-to. The best water in Hourdel harbour (which dries out) is near the quay. Obtain the advice of a local fisherman here as to the latest depths and channels to St. Valery. If, outside in the bay, you have seen the fishing fleet at work, it is well to ship one of their hands as a pilot. Thence to St. Valery a pilot is less advisable than essential.

The Somme bay is 5 miles wide, and the sea withdraws itself 9 miles from St. Valery, whence William the Conqueror set sail in his shallow fleet for England. The most comfortable berth is in the Somme Canal, which is entered by a lock. The latter is open for 2 hours each flood, and enables Abbeville to be reached. The bridges open in response to blowing a horn. The canal is available up to a draught of 11 feet. Hourdel at low water is muddy and malodorous. St. Valery is quiet, restful, and charming.

Spring tides rise 32 feet. Neaps rise 25 feet. For time of high water add 15 minutes to H.W.D. The tide leaves the harbours dry for four hours out of the six. At the extremity of Point du Hourdel tide signals are shown from a mast.

Treport is a small port comprising an outer harbour and a wet dock communicating with the Canal d'Eu. Entrance to the port is made between two stone jetties. This channel, together with the outer harbour, dries out—the former from 8 feet to 11½ feet, the latter up to 12½ feet. In the wet dock, whose gates are opened, day or night, from 1½ hours before until high water, there is a depth of 10 feet. The best time to enter Treport is an hour before high water. Go straight into the wet dock and lie there in security. If compelled to wait till sufficient rise of tide between the jetties, anchor outside North of the Granges Rocks, sandy bottom. This anchorage is tenable only during offshore winds. Hard breezes from NW to NE knock up a dangerous

sea off the jetties. The tide sets strongly across the mouth, and entrance should be made under motor. During the period when the wet dock gates are open, this is indicated by hoisting flag P (International) on the East jetty, in daylight hours : at night by a blue light.

Beware of the wind eddy coming off the high cliff West of the entrance, if you enter under canvas. There is a risk of being caught aback. Tide signals are made from a mast on the West jetty. Keep out until quite sure there is enough water, and allow for scend of sea. Bear in mind that the wet dock is entered via the inner as well as the outer harbour, and announce your advent by blowing on the fog-horn, so that the bridge may also be opened.

Provisions and motor fuel obtainable. Drinking water from the Dock Master.

Spring tides rise 32 feet. Neaps rise 24 feet 9 inches. For time of high water add 10 minutes to H.W.D.

Dieppe consists of an outer port, inner port, and a number of basins, but avoid entering or leaving at the time when the steamers are under way. Tides are strong, and it is well to enter under motor, owing to the danger of being blanketed by the piers. When a white and blue flag is hoisted on the West Pier, it signifies that the gates of the locks are open. There is often quite a nasty jobble off the mouth, especially when the wind is northerly. The best berth is in Berigny Basin, which is clean and restful. It is open from 1½ hours before high water till high tide, night or day. The bridge will be opened on demand, the signal being one blast on your fog-horn. If you arrive ahead of your tide, bring up temporarily in the SW corner of the outer port where you will probably see a pilot cutter near the church of St. Jacques. Duquesne Basin, which is entered through the fishing harbour, opens its gates at the same time as Berigny. The channel is dredged to a depth of 13 feet.

All repairs and stores procurable. Spring tides rise $29\frac{1}{2}$ feet. Neaps rise 23 feet. For time of high water subtract 14 minutes from H.W.D.

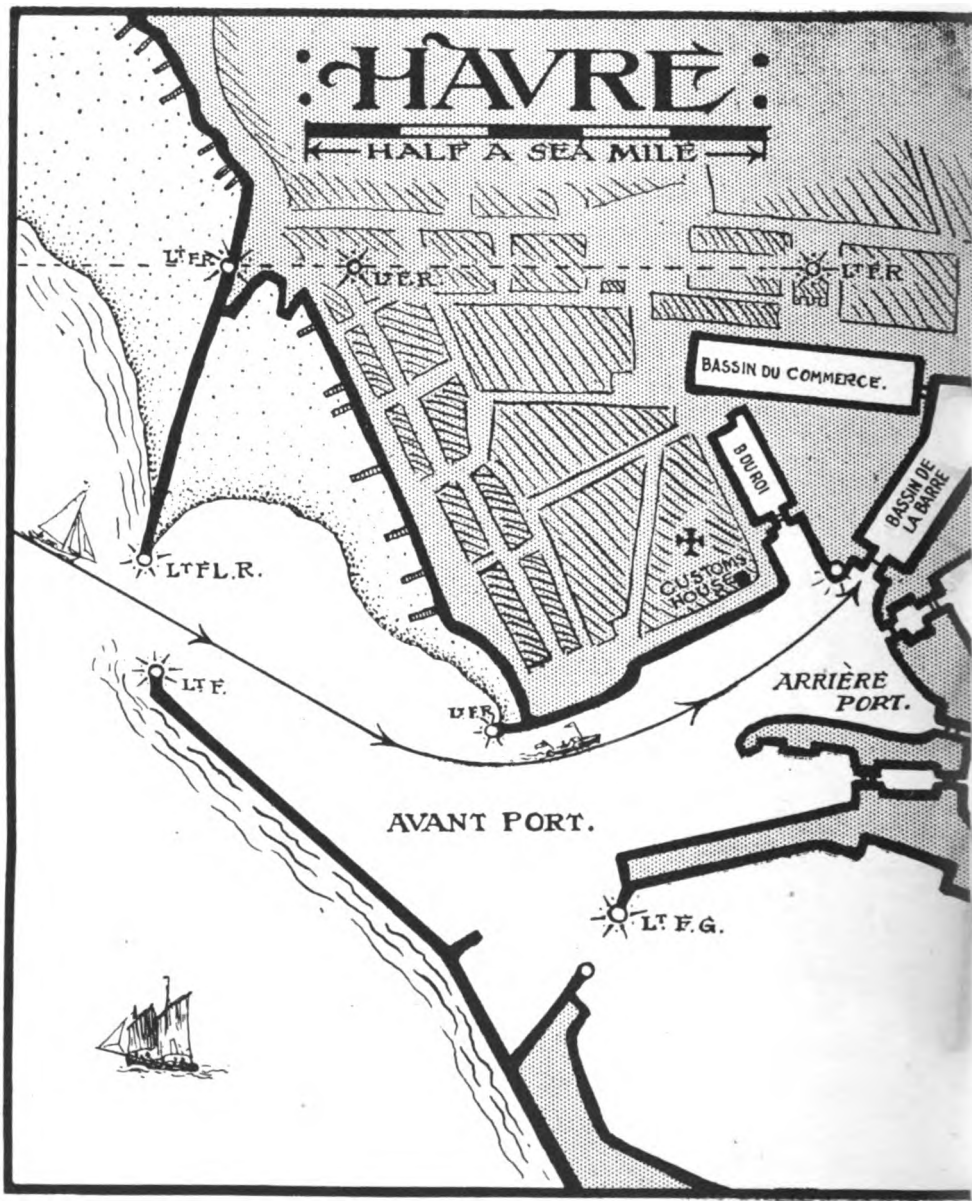
St. Valery-en-Caux is not to be recommended except conditionally. Across the two piers the tide runs at 3 knots. Enter at $1\frac{1}{2}$ hours before high water and go into the basin which is open from that time until high water. The Bar frequently shifts, and the channel dries as much as $11\frac{1}{2}$ feet, though even this figure cannot be relied upon. The outer port dries out, and is connected with the basin by a single lock. Beware when the sluice is opened for washing out the channel. The velocity is very violent. Spring tides rise 28 feet. Neaps rise 23 feet. For time of high water subtract 25 minutes from H.W.D.

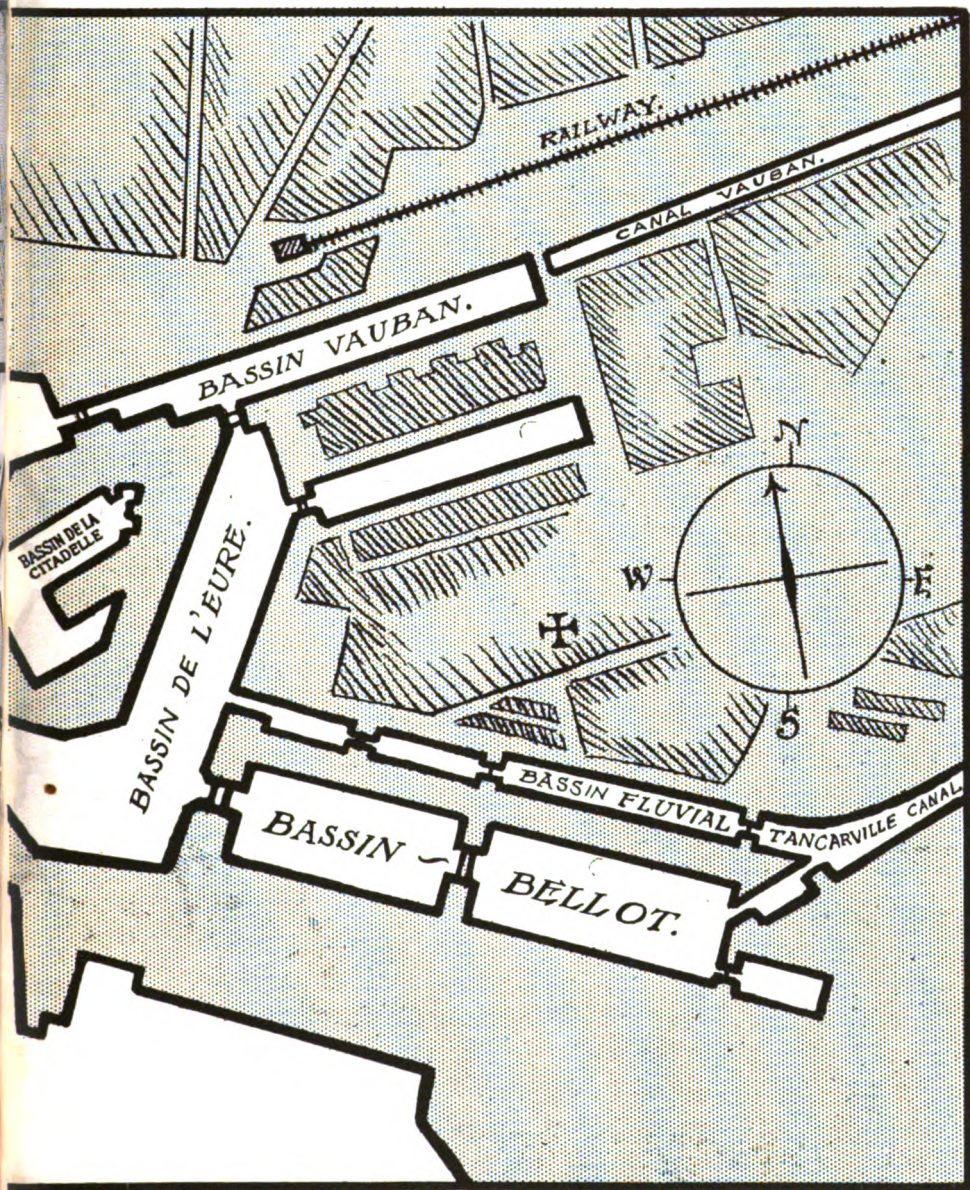
Fécamp. Here, as at most of these northern French ports, the tide off the entrance runs strongly. It is from here, as well as from other harbours, that vessels depart for the Grand Banks fishing. In approaching from the North, be sure to give a good berth to the Charpentiers rocks. Flag P (International) at the signal mast of the South jetty indicates that the wet docks are open. Berth in the Bassin Berigny, which is opened from $1\frac{1}{2}$ hours before till high water. Depths in the channel cannot be depended upon, but the best time for entering is about an hour before high water. There is a dangerous Bar in bad weather.

All repairs and stores procurable. Spring tides rise 25 feet 7 inches. Neaps rise 20 feet 6 inches. For time of high water subtract 29 minutes from H.W.D.

Fécamp Harbour is very dirty, disfiguring topsides and ropes.

Havre possesses so many basins that a yachtsman visiting here for the first time may find himself embarrassed. The





following simple directions, however, should suffice. Havre is quite easy of access, but watch the strong set of tide which sweeps past the entrance. If stopping only temporarily, let go anchor eastward of the North pierhead. It is better to enter one of the basins. Havre has the advantage of a prolonged high water, i.e. from about 1 hour before till 2 hours after high water, when there is so little alteration that entrance is not difficult even for big vessels. The basins are thus open for a period of 3 hours.

The best time to reach Havre is at high water slack, but when the tide is running at its hardest it has a maximum of $2\frac{1}{2}$ knots Springs, and $1\frac{1}{2}$ knots Neaps. Follow the track on accompanying Plan, passing through the avant port and the arrière port. Then lock through the gates at the NNE into the Bassin de la Barre, by which access is gained into the Bassin du Commerce. Many yachts make use of the latter, where they winter and fit out. It is very comfortable and near the centre of the town. Some prefer the Bassin de la Barre.

A yacht entering Havre preliminary to going up the Seine, bound for Rouen or the Mediterranean, should turn to starboard out of the arrière port and pass into the Tancarville Canal, which is straight and wide. There are locks only at the Havre end and the Seine end; and the bridges are opened on request. The advantage of this canal is that small craft can avoid the difficulties of the Seine mouth.

All repairs and stores procurable. Spring tides rise 25 feet. Neaps rise 21 feet. For time of high water subtract 2 hours from H.W.D.

Trouville Harbour and its approaches dry out. The best time to enter is just before high water, when there is plenty of depth in the channel, and the tides (which otherwise attain a velocity of 3 knots across the mouth) are slack. Go into the wet basin, which opens from $1\frac{1}{2}$ hours before

till $1\frac{1}{2}$ hours after high water. At top of high water Springs there is a depth of 16 feet in the entrance to Trouville. It is essential to work the tides accurately and not to arrive before tide time, for this is a nasty coast off which to be caught in bad weather. But Havre can be taken in all tides and weather.

At Trouville Spring tides rise 25 feet. Neaps rise 21 feet. For time of high water subtract 2 hours from H.W.D.

Honfleur is another somewhat difficult harbour. There is a 5-knot-tide across the mouth. At sufficient rise of tide enter between the piers and berth in the Bassin Carnot. The lock gates open from $1\frac{1}{2}$ hours before till $1\frac{1}{2}$ hours after high water—at least. Sometimes this period is prolonged. The best time to enter is $\frac{1}{2}$ hour after the first high water at Havre. All repairs and stores procurable.

Spring tides rise 26 feet. Neaps rise 21 feet. For time of high water subtract 2 hours 20 minutes from H.W.D. All repairs and stores procurable.

Ouistreham is perfectly easy of entry, but yachts should enter just before high water ; firstly, because the 2-knot-tide off the mouth becomes slack ; secondly, because there will be no necessity to remain in the outer harbour (where you will dry out), but it will be possible to pass through the lock gates into the canal which leads to Caen.

In approaching Ouistreham, pick up the light-and-whistle red-and-black buoy lying 3 miles NNE of the harbour entrance. At sufficient rise of tide enter, leaving all red buoys and beacons to starboard ; all black beacons and buoys to port. The channel between the dykes dries out, but the depth of the entrance channel varies. It dries out from $1\frac{1}{2}$ to 5 feet, yet normally at high water Springs there will be not less than over 20 feet.

The Ouistreham lock gates open from 2 hours before

till 3 hours after high water. The outer harbour has a bottom of soft mud. The best berth unquestionably is within the Caen canal, which is quiet, pleasant, wooded, and pretty. Since the War it has been deepened and made wider. If proceeding up to Caen, the services of a pilot are compulsory for all foreign vessels, irrespective of tonnage. The least water in this canal is 19 feet. Caen itself offers secure berthing, with the disadvantage of coal dust. Berth in the Vieux Bassin (otherwise known as the Bassin St. Pierre). There are no lock gates at Caen, but in addition to pilotage fees there are canal dues. Four bridges (worked by electricity) span the canal, and the signal for opening is one long blast on the fog-horn. But the bridge at the Vieux Bassin is closed from 6.45 a.m. to 7 a.m. ; noon to 12.15 p.m., and 1.15 p.m. to 1.30 p.m. for the convenience of workmen.

All repairs and stores procurable. Spring tides rise 25 feet. Neaps rise 20 feet. For time of high water subtract 1 hour 40 minutes from H.W.D.

Cherbourg. The area between Havre and Cherbourg possesses no harbour that can be entered at all states of the tide and weather. This is no pleasant coast off which to be caught out. Cherbourg, however, offers excellent shelter not merely for the largest liners but the smallest yachts. Enter under all conditions by the West entrance. When the signal FU (International) is hoisted from Ile Pelée fort, it means that torpedoes are being run and the eastern entrance is temporarily closed. A red flag is hoisted aboard the *Imprenable* (see Plan) when torpedo practice is taking place.

The central detached breakwater is 2 miles long. To the South thereof, distant 1 mile, lie the Digue du Homet and Jetée des Flamands. The best anchorage for a small yacht will be found after passing between these two. Bring up in the SW corner of this Petit Rade in about 2 to 3 fathoms.

The Grande Rade (North of the Digue du Homet and Jetée des Flamands) can become extremely unpleasant for other than big vessels.

But for small craft the most complete shelter can be obtained nearer to Cherbourg itself by entering the avant port to the South (leaving the eastern mole to port) and passing between the jetties. Moor on the western side of this avant port, with anchor ahead and a line to a buoy astern, but away from the quay. A yacht could go further in still, by passing through the gates into the Bassin à Flot, which are open from 1 hour before till 1 hour after high water. A good place for leaving a dinghy temporarily, as well as for landing, is at the SW corner of the avant port. Here officials are always about. There is a depth of about 10 feet at the East side of the avant port.

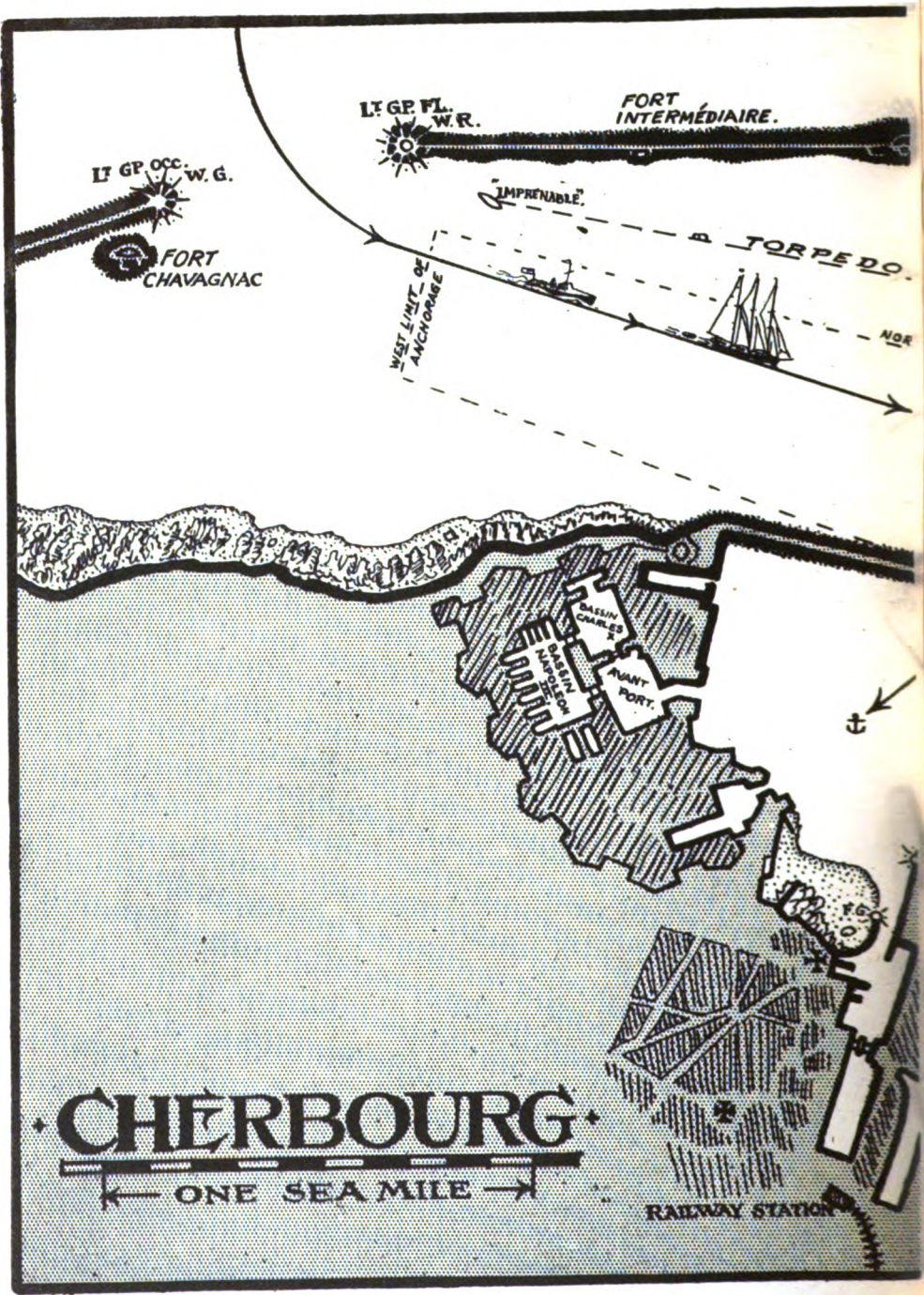
Beware not merely of torpedoes, but of seaplanes. Also anywhere near to French men-of-war, naval mooring buoys, or forts. The Port Militaire is on the western side of the Petit Rade, where there are always some service buoys. Anchor no nearer than 200 yards from such a buoy.

The tides at either side of the central breakwater run strongly. On the eastern side they attain a velocity of 4 knots; on the western side 2 knots. All repairs and stores procurable.

Spring tides rise 20 feet 8 inches. Neaps rise 16 feet. For time of high water subtract 3 hours 11 minutes from H.W.D.

NOTE. The tides off the North of this peninsula are very violent, creating an atrocious sea when tide is against wind. Under such conditions, during the period of Springs, it is prudent for small craft to keep 6 miles NE of Barfleur Race.

Anse de St. Martin. This useful bay lies just East of Cape La Hague. Although exposed to the NE, it is protected from East through South to North, and in fine weather



LT GP OCC. W. G.

FORT CHAVAGNAC

LT GP FL. W. R.

FORT INTERMÉDIAIRE.

"IMPRENABLE"

WEST LIMIT OF ANCHORAGE

TORPEDO

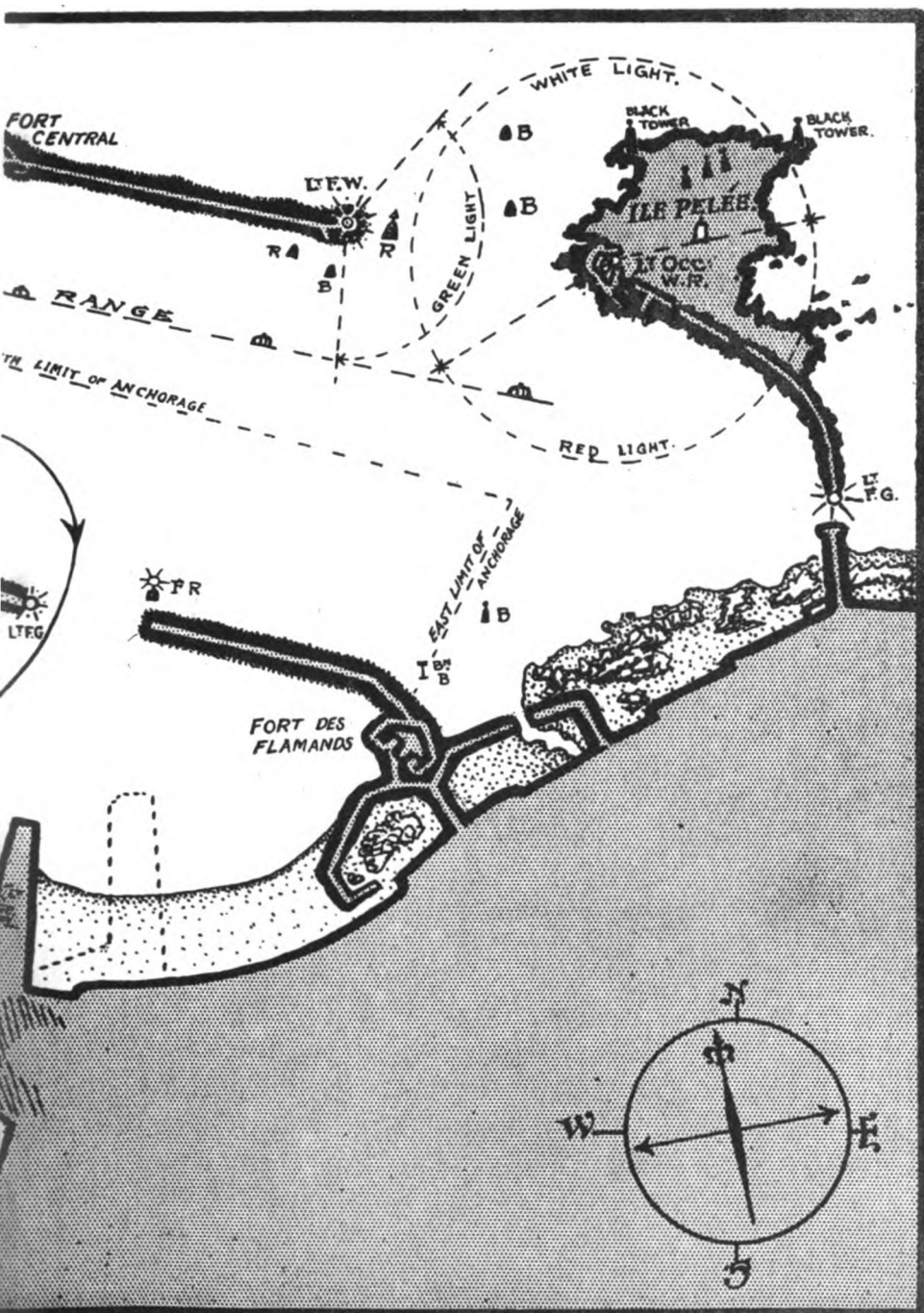
NOR

BASSIN CHARLES X
AVANT PORT.

CHERBOURG

ONE SEA MILE

RAILWAY STATION



will be found of convenience when awaiting a fair tide through Alderney Race.

Channel Islands.

Alderney is not frequently visited by yachts, and is none too comfortable ; but small yachts (provided they have legs) can go into Little Craby Harbour (within Alderney Harbour), where they will be afloat for little more than half tide. The Old Harbour at the head of Alderney Harbour dries at low water Neaps and is nothing like as well sheltered as Little Craby. The best anchorage is in the New Harbour between the jetty and the slipway steps of the big breakwater.

In entering this port, *beware of the submerged remains of the West Breakwater*. For strangers this constitutes a real danger. The depths inside vary from 2 fathoms to 4 fathoms. Watch the set of tides when coming in. The leading marks are the spire of St. Anne's church tower in line with the pierhead of the Old Harbour, but do not enter at night. Let go anchor with plenty of cable. Supplies limited.

Spring tides rise $23\frac{1}{2}$ feet. Neaps rise 17 feet. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D. In fine weather Alderney is of convenience as a temporary anchorage when wishing to do the passage between Guernsey and the Isle of Wight in two stages.

Guernsey has only two harbours—St. Peterport, and St. Sampson's—though there is more than one bay where those who like to take the risk may anchor temporarily. Practically all visiting yachts make for St. Peterport. If approaching by the Little Russel channel, sight the Platte Fougère, which has a grey octagonal tower with black band, but leave this a long way to the West, so as to avoid the Canupe rocks. Steering a course $SW\frac{3}{4}W$ so as to have the extremity of the southern breakwater of St. Peterport on with Belvedere House, you leave the Roustel beacon on the

East. The Roustel will readily be recognized by its unusual appearance, having a black-and-white chequered iron tower, with dark green railings, davit, and light shown from a green lantern.

If approaching from the West and South, steer to pick up Les Hanois lighthouse off the western end of Guernsey, and to carry a fair tide thence, round St. Martin's Point into St. Peterport. Thus the best time for reaching Les Hanois (which is a grey granite tower with lantern 117 feet high) is from 4 to 6 hours after H.W.D. Give Les Hanois a berth of $1\frac{1}{2}$ miles, and the coast thence a berth of 1 mile till St. Martin's Point bears North (Magnetic). A safe course to St. Peterport thereafter is $N\frac{1}{2}E$ for the conspicuous Saumarez Monument, until abreast of St. Peterport, when enter.

The greatest rate of tide between Les Hanois and St. Peterport at Springs is $3\frac{1}{2}$ knots, but at Neaps $1\frac{1}{2}$ knots. In the Russel the tide is running at its greatest strength during the time of local high and low waters. NE winds delay the tides : SW winds accelerate them. From 3 hours before to 3 hours after H.W. St. Peterport the tide goes NE in the Russel. From 3 hours after H.W. till 3 hours before, it runs SW.

It should be borne in mind that the whole of the NW Guernsey shore is inhospitable, with numerous reefs projecting to such a distance that the coast should never be here approached nearer than $3\frac{1}{2}$ miles. Although normally the mail steamers to St. Peterport, whether from Weymouth or Southampton, use the Little Russel channel, many yachtsmen find Les Hanois-St. Martin's Point route the simpler.

St. Peterport. In approaching from the South do not be tempted to keep too close in to the shore, as there exist several dangers including the Ferico Rock just South of the South Pier. The entrance is quite easy, but be alert for the mail and other steamers. Get the entrance well open,

ST PETER PORT • GUERNSEY.

SCALE

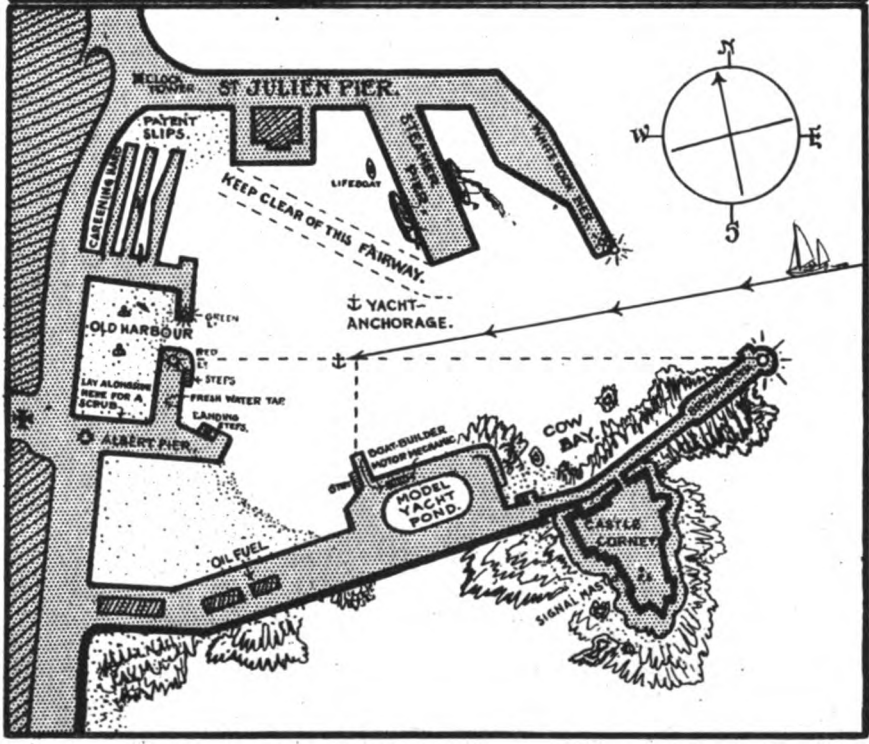
5 CABLES

LIGHTHOUSE ON SOUTH PIER AT ENTRANCE TO OLD HARBOUR.



ANCHOR WITH THESE TWO LIGHTS IN LINE.

LIGHTHOUSE AT END OF SOUTH BREAKWATER ENTRANCE TO THE OUTER HARBOUR.



proceed (as in accompanying Plan) across the harbour in a westerly direction, but do not anchor until well past the Steamer Pier, nor to the NW of that pier's extremity. Otherwise, the Harbour Master will request you to shift. The mail steamers berth on either side of the pier, and come along with a great deal of way.

The snuggest berth for small craft drawing not more than 7 or 8 feet is abreast of the stone steps (which are immediately West of the Model Yacht Pond and some corrugated iron sheds), keeping the lighthouse at the end of the southern breakwater in line with the lighthouse of the South Pier at the entrance to the Old Harbour. This will be immediately understood by reference to the Plan. Whilst the anchorage with these two lights in line is ideal in most winds, yet East and SE gales make the berth very unpleasant. Under such circumstances the only thing is to find anchorage abreast of the lifeboat which lies afloat. The rise and fall of tide at Springs is not small, yet vessels ride head to wind all the time. Avoid getting too far West of the spot denoted, as the water soon shoals. There is very little traffic into the Old Harbour, which affords excellent facilities for a scrub. Turn sharp round to port, and lay alongside the southern end.

Oil fuel in any quantity can be obtained in the Albert Dock, as indicated. Excellent fresh water from a tap on the SE side of the Old Harbour on the quay. Land at the Albert Pier, but a dinghy should not be left for long, as the tide rises and falls very quickly. Yachts are hauled out for the winter on to the Castle Pier by means of a slipway West of the Model Yacht Pond. There is an excellent motor mechanic at this spot, together with a boat-builder alongside capable of doing any yacht repairs.

Provisions can be obtained ashore, the market and shops being all close to the landing. There is also a local Meteorological Office. Motor-buses run regularly to most parts of the island.

In really bad weather likely to last several days, small yachts suffering discomfort in the Outer Harbour will find better shelter within the Old Harbour alongside the quay. St. Sampson's Harbour is a little North of St. Peterport, and is fairly sheltered but dries out. There exists a sailmaker.

Spring tides rise 26 feet 9 inches. Neaps rise 19 feet 7 inches. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D.

Temporary anchorages in Icart Bay and Petit Port Bay, but clear out before the wind comes onshore.

Sark. Creux Harbour, on the East side of Sark, gives good shelter to small craft, but dries out, the bottom being soft sand. The best water is just inside the head of the northern breakwater. Good cables and warps essential. Local fishermen will assist. Good drinking water from stream in SW corner of the beach in harbour. Supplies limited, but dairy produce available.

There is good anchorage in Grève de la Ville (Sark), and in this bay you can get out of the strong tide. It is very popular among the local fishermen for the excellence of its shelter. Nevertheless, in fresh breezes there is some motion felt.

Jersey. St. Helier does not welcome small yachts enthusiastically, nor do the latter find the harbour attractive. It is neither pleasant to be shifted when once settled, nor is it convenient to lie alongside a deep wall, take the ground, and have to watch ship to see that she lists inward. The approach to St. Helier is through a maze of rocks, and the tides are very strong. In thick weather be especially wary of the Corbière, where more than one good ship have met disaster.

Directions for entering St. Helier: Having arrived off Noirmont Point get the following in line ($E\frac{1}{2}S$)—Dog's Nest

Rock Beacon (iron pole and ball) ; the white iron structure containing the light of La Grève d'Azette ; and St. Clement's light structure (also of iron and white) well inshore. So carry on until the leading lights (fixed red and green) of Albert Pier bear NE $\frac{1}{4}$ N, when go for them. So continue till the harbour is open, but watch carefully the set of tide, and steer for the two green lights in one at the South end of the Old Harbour.

Spring tides rise 35 feet. Neaps rise 26 feet. For time of high water subtract 4 hours 40 minutes from H.W.D.

Temporary anchorage can be obtained in NE winds under the lee of St. Aubin's Castle during settled weather only. A fresh south-wester would make this a dangerous berth. St. Aubin Harbour can be entered by small yachts at half flood, though it dries out. Go in between the two piers, the narrow opening facing NE.

If caught off the East coast of Jersey in all winds from North through West to SW St. Catherine Bay affords very good shelter for small yachts with plenty of water, but enter under power. Beware of the weed at bottom, and drag the anchor well home into the muddy sand. Gorey Harbour dries out. Secure to wall. Enter at $\frac{3}{4}$ flood.

CAUTION. In making a passage between the Channel Isles and the French coast it is of absolute necessity to keep a check on the rate and direction of the tides which are changing all the time. Especially is this to be stressed in thick weather during Springs, and in regard to the neighbourhood of the Minquiers. To make the land near Cape Fréhel under these circumstances is not done without anxiety, for sometimes the fog lifts only a part of the way up the cliff, entirely hiding the lighthouse which unfortunately has no fog signal. At Springs the tide sluices past these outlying rocks at certainly not less than 5 knots. Wind against tide soon kicks up a wicked sea.

CHAPTER XII

(FOREIGN SECTION. PART II)

ST. MALO TO BORDEAUX

St. Malo is one of the least easy harbours to make and enter. The approaches are strewn with myriads of rocks, the current is fierce (at least 5 knots), and the rise of tide at Springs exceeds 40 feet. In the summer sometimes fog settles down for several days, making the difficulties to become dangers. No one should cruise in this vicinity without a large-scale chart and full understanding of the direction of tides. For the latter it will be well to use the British Admiralty Tidal Charts.

To reach St. Malo consists of (1) the Approach, (2) the actual Entrance.

(1) The Approach may be said to begin as far away as Cape Fréhel. In clear weather there is no difficulty in identifying this headland, with its perpendicular cliffs, its light shown at an elevation of 259 feet, from a grey octagonal tower 87 feet high. But during fog it may be impossible to see the lighthouse for several days. Approach to within about a mile of this headland, and arrange to be off here about 4 hours before high water St. Malo, so as to carry a good tide all the way into the latter and arrive when the gates are open. From the above position off Cape Fréhel steer ESE½S, which will bring you to Les Buharats black bell-buoy having a cylindrical topmark. This is the first of the marks and will be left to port. The source is now East by South, and the channel is beautifully marked, leaving the red buoys and beacons to starboard, and the black to port.

Directly ahead will be seen Le Grand Jardin Lighthouse (69 feet), but turn to starboard just before reaching it, because of its reef. Sometimes in thick weather this lighthouse will not be seen from a distance, but there may be an occasional sight of Cezembre Island. If the latter can be picked up, it may be remembered that Le Grand Jardin lies only $\frac{1}{2}$ mile to the SW.

Having passed the latter lighthouse, the course is SE $\frac{1}{2}$ S, the channel again being excellently marked. By night this course has two splendid leading (fixed) green lights, which are very powerful. They will be seen directly ahead, the lower light (Les Bas Sablons) being in line with the higher light (La Balue) situated the other side of St. Servan.

(2) The Entrance. In practical navigation the port of St. Malo begins when abreast of the white-and-black buoy which lies West of the Mole des Noires, which is a stone horseshoe-shaped pier with a lighthouse at its seaward end. At low water the outer port (of which this Mole forms the western limit) dries out, so even the lifeboat becomes aground, though there is a narrow channel for the local vedette boats. The channel to new lock has 4 metres at L.W.O.S.

During the last few years very important alterations have been in progress here, and the entrance to St. Malo's wet docks is now made through the new lock which is 525 feet long and 82 feet wide. The direction of this lock is noted on the accompanying Plan. The gates are always opened between 1 $\frac{1}{2}$ hours before till 1 $\frac{1}{2}$ hours after local high water. The best time to arrive here is at top of high water, when the tide is slack. But vessels are allowed to enter also at other times, e.g. if a steamer, a large yacht, or a group of small yachts should require this. Signal, by day, for entering : a square green flag. Signal for coming out : a square red flag. Signal, by night, for entering : one white light above a green light. Signal for coming out : one white light above a red light.

Having passed through this big lock, turn sharp to port, and at the north-east end of this first basin you pass through another lock and swing bridge into the Bassin à Flot. There is a convenient berth (as marked in Plan) anywhere near the Casino, or 100 yards East of that building. The water is moderately clean, dust blows off from the quay, and there is not too much privacy. On the other hand this berth is absolutely secure, out of all traffic, within half a minute's walk of a glorious sandy beach for sea-bathing; and well situated for shops, restaurants, etc. The Bureau de la Poste is close to the cathedral. Adjoining this Casino berth also is a large garage whence petrol and lubricants can be procured. Excellent staff of motor mechanics for any repairs. Paraffin can be obtained in tins and delivered alongside. Inquire at St. Servan.

Spring tides rise 40 feet. Neaps rise 30 feet. For time of high water subtract 5 hours from H.W.D. .

NOTE. It should be added that there is a second approach to St. Malo, which is used by the mail steamers, and may well be followed when leaving this port. Provided Le Vieux Banc black-and-red bell buoy, lying about $3\frac{1}{2}$ miles WNW of Ile de Cezembre, can be located on coming in, steer $SE\frac{1}{2}S$ (the green lights as before in line) until nearly up to Le Grand Jardin, when sheer off temporarily to the westward to clear the rocks, and then resume the previous course.

CAUTION. The anchorage off Dinard is so exposed to the strong tides as well as to northerly winds that small yachts will find this berth unbearable. In fine weather, when there is no hard wind from NW, and especially during Neap tides, there is a charming anchorage inside the Solidor Bank and abreast of Solidor Tower off St. Servan, which adjoins St. Malo. (See Plan.) It is well to obtain a mooring temporarily. (Apply to Monsieur Mitre, yacht-builder, St. Servan.) Here the tide at Neaps has a velocity of 2 knots;

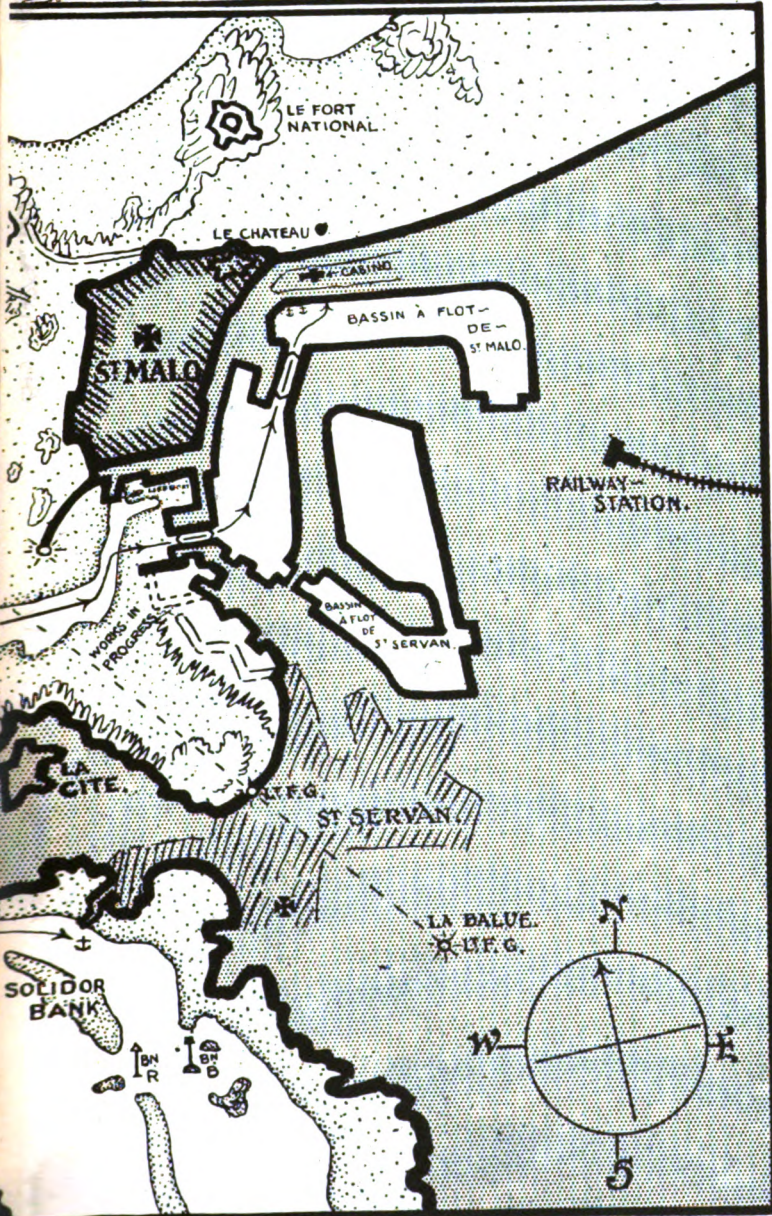
NOTE ON ST. MALO

IMPORTANT works, carried out up to 1936, have now increased the convenience of yachts. No longer is it necessary to proceed through a second lock: instead of proceeding to the Bassin à Flot, yachts should, after negotiating the first lock and entering the large Bassin Vauban, go right up to the extreme north of the latter where the space is specially reserved for yachts of all sizes. Here are mooring-rings, bollards, stone steps, vertical ladders, water-taps, telephone box. Lie afloat all the time. There is also a *gardien* in attendance. Lock dues 15 centimes per gross ton burthen. Sanitary dues 30 centimes per net ton burthen. The approach is well-lit at night, and every consideration is given to yachtsmen. The Southern Railway steamer quay is adjacent.



ST MALO.





at Springs 4 knots. If bad weather threatens, and you are unable to make St. Malo lock gates, run up the River Rance and bring up in the bay on the western side off La Richardais, just South of the red buoy. This is a safe and excellent anchorage out of the tide.

St. Briac. This is a small harbour which dries out and is not much frequented. But it so lies between C. Fréhel and St. Malo, that under certain circumstances it might be of great convenience to a small yacht for the night. Apart from this, St. Briac is very beautiful. The largest scale French chart should be used. Enter at high water leaving the red beacons to starboard, and the black to port; go right in, put out legs and take the ground, which is hard with a thin layer of mud. Even with westerly gales there is very little swell. Supplies from Dinard. In fine weather anchor outside the harbour except in hard NW to NE winds. Tides as at St. Malo.

Pontrieux River. Yachtsmen visiting this coast must needs pay the most careful attention to the strong tides and the many dangerous rocks. Entrance to the Pontrieux River should be made on a SW by West course with La Croix light in line with Bodic light, leaving to starboard the red conical buoy (with conical topmark) off the Plateau des Sirlots. If coming in under sail with the flood tide, beware of the latter setting you to the SE in the direction of the Plateau des Echaudes, a treacherous rocky patch. The stream runs at quite 5 knots. Leave to port the tower and buoy of the Plateau des Pen Azen. The former is a stone beacon with black-and-white bands: the latter is of the spindle type. It is well to use the motor when entering for the first time unless there is a fresh NE breeze. The marks are excellent, and good anchorage can be found by carrying on up the river beyond the Coatmer leading lights till you get to the pool below Lézardrieux village. Here let go

below the Perdrix rocks on the East side of the pool. This is a very beautiful berth amid pine-trees, gorse, and much that is eye pleasing. Stores obtainable from Lézardrieux, including meat, bread, paraffin. But if leaving the dinghy unwatched, remember that Spring tides rise over 30 feet. NE winds against the ebb tide make the anchorage just above Coatmer Tower unpleasant. With SW gales the berth off Lézardrieux quay is uncomfortable because of the tide.

During the summer French yachts race from Dinard to the Ile Brehat. Small craft can find shelter in La Corderie, which is on the West side. It is well marked by beacons, but demands caution.

Spring tides rise 34 feet. Neaps rise 26 feet 7 inches. For time of high water subtract $4\frac{1}{2}$ hours from H.W.D.

Treguier River. Enter by the Grande Passe. Having located the grey granite lighthouse (170 feet high) of Les Heaux, sight La Jument red buoy, and then Les Renauds black buoy which is at the entrance to the Grande Passe. Arrange to be at Les Renauds $4\frac{1}{2}$ hours before high water Brest, when the flood tide sets East until $1\frac{3}{4}$ hours after H.W. Brest. Spring tides have a velocity of nearly 5 knots : Neaps about $2\frac{1}{2}$ knots.

Les Renauds buoy from La Jument buoy bears W by $S\frac{1}{2}S$, distant $2\frac{1}{3}$ miles. Leave Les Renauds at a distance of 600 yards to port, and steer SE by $S\frac{1}{4}S$ for La Chaîne and St. Antoine (further inland) lighthouses, which must be kept in line and are on the eastern side of the river. Carry on leaving the Pierre à l'Anglais red spindle buoy to starboard till you come to the red spindle buoy of Petit Pen ar Guezec. Immediately after rounding the latter alter course to $SW\frac{1}{4}S$ and make for the Corne lighthouse, but beware of the Banc de la Pie to starboard. When the black tower and the red beacon of Les Trois Pierres come in line, steer West towards the Tourelle du Taureau until the distant spire of Tréguier cathedral is

in line with Skeiviec Rock bearing $SW\frac{1}{2}S$; but then alter course to that bearing. So continue, passing the Corne lighthouse at a distance of 60 yards, but next get the Corne lighthouse in line with the black tower of Les Trois Pierres astern. A course SW by $W\frac{3}{4}W$ will lead safely through this reach. The river now takes a more southerly trend and narrows, but there is no difficulty: leave the red beacons to starboard and the black to port. There is excellent anchorage, well protected from wind and tide in $2\frac{1}{2}$ fathoms just past the sixth red beacon after Skeiviec Rock. This is known as the Palamos anchorage. Some supplies can be obtained at Tréguier. At Neaps there is a depth of 5 feet off Tréguier quay. Spring tides rise 32 feet. Neaps rise $24\frac{1}{2}$ feet. For time of high water at entrance to Tréguier River subtract $4\frac{3}{4}$ hours from H.W.D.

Morlaix River. If coming from the North or East, sight Les Trepieds black whistle buoy and leave it to port. Thence to the red bell buoy (with topmark) moored NE of the Pot de Fer. Leave it to starboard. Now get in line (1) the lighthouse of the Island of Louet, and (2) the Tour de la Lande Lighthouse, which is 285 feet high, white and square, and is situated on the southern shore. Keep these two lighthouses bearing South by West and steer on this course, thus passing Stolvezzen black spindle buoy to port: Ile Ricard red tower as well as La Morlouine red beacon to starboard. The Calhic Rock is marked by a red tower surmounted by a triangle. Leave this 300 yards to starboard, and alter course to South till nearly up to Le Corbeau red beacon tower, when alter course to S by E, passing between this tower (to starboard) and the Chateau du Taureau black beacon tower (to port).

Still steering South by East, passing between Ile Louet and Ile Noire, leave the red Barre de Flot buoy close to starboard, and after a distance of $1\frac{2}{3}$ miles you arrive abreast of Chateau

de Lanoverte, a house with five chimneys. Here anchor in 2 fathoms, mud, the position being just South of the second *white* mooring buoy, and the house bearing $E\frac{1}{4}S$. The scenery is beautiful. Supplies can be obtained from the village of Loquenole on the West bank, or from Morlaix, or from Carantec (West of Ile Louet).

Spring tides at Ile Louet rise 28 feet. Neaps rise $21\frac{1}{2}$ feet. For time of high water subtract 6 hours from H.W.D.

NOTE ON TIDES. At the Pot de Fer buoy the tide runs East from $4\frac{1}{2}$ hours before till 2 hours after H.W. Brest, and SSE for the next 3 hours. Maximum rate 3 knots. Tide turns SSW at 1 hour after H.W. Brest, and then through W to NNW until $4\frac{1}{2}$ hours before H.W. Brest. Rate of tide in the river is about 2 knots.

L'Abervrach is a most convenient anchorage after having just crossed the English Channel, or when about to depart from France for England. Although there are outlying rocks innumerable, there is an excellent well-buoyed main channel. Ile Vierge stone lighthouse is circular and 252 feet high; it is, therefore, under normal circumstances an ideal landmark to locate when arriving from England. But there is a fair amount of fog off this coast, and the mark is sometimes obliterated by the burning of kelp when the wind is offshore. When once the outermost marks have been identified, the entrance is easy and the tides are somewhat strong. During an onshore gale with misty weather it would not be advisable to run for L'Abervrach.

It is better not to get South of Ile Vierge bearing East by South until the entrance marks have been sighted. La Petite Fourche red buoy must be left to the South. Having spotted this, proceed eastward under easy canvas till the white square lighthouse (59 feet high) at the southern end of Ile Vrach comes in line with the white square lighthouse (171 feet high) of Lanvaon. Keep these in line SE by $E\frac{1}{2}E$, and so

steer until just past the Petit Pot de Beurre white-and-red tower. Now alter course $SE\frac{1}{2}E$ with the white circular lighthouse (29 feet high) of La Palue mole in line with the white circular lighthouse (49 feet high) of St. Antoine.

Most yachts anchor in 5 or 6 fathoms in the pool SW of Ile Bilou, but this is an uneasy berth if it is blowing, especially from NW. It is, therefore, better to go further up beyond the Touris black tower, but beware in so doing of getting ashore on the South side. There are hotels at L'Abervrach. Provisions and drinking water available. Train to Brest.

Spring tides rise 26 feet. Neaps rise 20 feet. For time of high water subtract $6\frac{1}{2}$ hours from H.W.D.

Chenal du Four. At Springs it should be borne in mind that the flood tide from the Atlantic into the English Channel rushes round the NW of Ushant Island at 7 knots (maximum). It is obvious that with wind against tide there results a sea that will punish any small craft. All round Ushant are powerful tides and races, and if caught off here in hard winds from West or SW, it is better to run for L'Abervrach should the tide for the Chenal du Four be unsuitable. But for winds from North or NE or East there exists at the SW side of Ushant a natural harbour, known as Lampaul Bay, affording excellent shelter. The entrance is easy, but avoid Le Corce rock midway. The bottom is sand, and you can anchor near the head of the bay, but small craft may secure to the innermost mooring buoy and lie afloat in 4 fathoms. Land at the small harbour, enclosed by jetties. It dries out. There is a small hotel in the village. Lampaul Bay should be quitted at the first signs of a blow from West or SW.

To pass through the Four Channel it is essential to carry a fair tide, and to get hold of the leading marks. Thus, in approaching from the North, identify Le Four lighthouse which is a substantial affair of grey stone, circular, and 92 feet high, with a reed fog signal. Sometimes this light-

house is not picked up until as close as 100 yards away ; for the local burning of kelp (already mentioned) creates a fog. From a position 3 miles West of Le Four lighthouse steer $S\frac{3}{4}E$ with Kermorvan and St. Mathieu lights in line, thus passing between Les Platresses and La Valbelle. So continue until Pointe de Corsen white circular lighthouse (105 feet high) bears $NNE\frac{1}{2}E$, when alter course to $SSW\frac{1}{2}W$, passing between Le Rouget red conical light buoy (showing a fixed green light) and the Grande Vinotiere light which is shown from a black octagonal tower 49 feet high : but alter course to $SSE\frac{1}{2}E$ when Les Vieux Moines black octagonal tower (49 feet high) so bears. The latter course " borrows " slightly, but is quite safe for small craft. Give Les Vieux Moines a fair berth, watch the tide, and then proceed up the Goulet to Brest. If stopping only a tide, let go anchor in Bertheaume Bay.

TIDES. At the North entrance to the Chenal du Four the tide sets SSW at 45 minutes after H.W. Brest, and sets NNE from $5\frac{1}{4}$ hours before H.W. Brest. Spring tides have a velocity of 4 knots, except that off La Vinotiere the rate is 7 knots. The flood coming from the Atlantic at the South entrance of the Four Channel separates—one half flowing North up that channel, the other half making for Brest. Craft coming North through the Four use the ebb, so that when they reach the Goulet they find a foul tide.

Brest. Let go anchor in the Port du Commerce. The holding ground is not of the best. All supplies and repairs procurable. The Chateaulin River is beautiful and visited by yachts. It affords some snug anchorages. Spring tides rise $24\frac{1}{2}$ feet. Neaps rise $19\frac{1}{2}$ feet. For time of high water add $5\frac{1}{4}$ hours to H.W.D.

Camaret. Bring up off the end of the breakwater in $1\frac{1}{2}$ fathoms. Suitable in offshore winds. Clear out if the wind

comes anywhere between SW and North. Note that a chain is laid in Camaret Bay, so that should the fishing boats drag their anchors they will be stopped. This chain is marked at its centre and ends by three white buoys. Yachtsmen will, therefore, bring up clear of the same. The harbour dries out. All repairs procurable. Good for a scrub.

Morgat Bay at the NW corner of Douarnenez Bay is a very pleasant temporary anchorage when the wind is northerly, but southerly and easterly winds render it uncomfortable. Anchor near the jetty.

Douarnenez is not to be recommended for yachtsmen, Audierne being preferable. There is, however, a fishing fleet at Douarnenez, and all repairs could be made to a yacht.

Raz de Sein must needs be treated with respect. Take the first of the fair tide through. The stream at La Vieille sets NNW from time of H.W.D. till $4\frac{1}{2}$ hours after the same. It then slacks for half an hour, but sets SSE from $6\frac{1}{2}$ hours before H.W.D. till just before H.W.D. Velocity of tide is 5 knots. Small craft should not attempt this race when wind is against tide. Slack water is a good time ; advisable at Neaps, and essential at Springs.

Audierne Harbour is ordinarily safe of entry but should not be attempted during gales from SE, South or SW if it has been blowing for some time. Approach by steering with the two lighthouses in line NNE. These are situated West of the harbour, the innermost light (Kergadec) being red, and the outermost (Trescadec) being green. Steer on this bearing until the white light at the end of the pier (Raoulic) shows red. Then go for the harbour, but beware of the projecting rocks. Having passed the Mât Fenoux, keep over to the western shore but giving all corners a good

berth. Anchor in 6 feet (sand) just below the bridge and run a line out to the bridge. Tide runs here at about $3\frac{1}{2}$ knots. Good hard for scrubbing on the NW side. The best time to enter Audierne is during the last hour of flood. By permission of the Harbour Master the bridge can be opened and yachts may bring up above the bridge in about 12 feet. If staying only a tide, anchor outside the Raoulic pier.

Spring tides rise 19 feet. Neaps rise $15\frac{1}{2}$ feet. For time of high water add 6 hours to H.W.D.

Benodet. The entrance is well marked and lit. The river is restful, snug, with green wooded banks that are reminiscent of Devonshire. The river can also be ascended to Quimper, which has an old world attractiveness. Drinking water obtainable from the village. The tide runs strongly, and in thick weather the entrance is not easy. But the dangers are well defined, all black buoys and beacons on entering being left to port; whilst red beacons and buoys are left to starboard. Steer due North (Mag.) with Benodet lighthouse in line with du Coq lighthouse. The former is 151 feet high: the latter 33 feet. Just before reaching du Coq Point bear away, leaving the red buoy to starboard. Keep in mid-stream and bring up NNW of the church, over towards the western shore in 2 fathoms, mud. Pine woods. Good bathing. One of the pleasantest places on the West coast. Scrubbing can be done against the quay.

Spring tides rise 16 feet. Neaps rise $12\frac{1}{2}$ feet. For time of high water add 5 hours to H.W.D. There is at Benodet a yacht yard for laying up.

Concarneau is a very picturesque fishing port frequented by the sardine and tunny fleet, who frequently crowd the harbour. Many bring up outside the harbour entrance but there is always water enough inside for a craft drawing $4\frac{1}{2}$ feet to lie afloat at the top. Yachts of nearly twice that depth can also choose a berth in the inner harbour which is

approached through a narrow passage between the old town and the shore. If preferring to remain outside, bring up off Lauriec in $3\frac{1}{4}$ fathoms. Land at La Ville Close for shopping. The leading marks when approaching Concarneau are La Croix (front) light (46 feet high) at the western side of the entrance in line with Beuzec (rear) light (177 feet high). Both are white circular towers. Le Cochon red tower is thus left to starboard. Carry on till within the arc of visibility of Lauriec light, when bear away East by $N\frac{3}{4}N$, leaving to starboard the Men Fall red conical buoy with conical topmark. This course will take you so that the southernmost white pyramid comes in line with the white mill. The harbour will then be seen open. Keep in the middle of the same.

All repairs and provisions procurable. Spring tides rise 16 feet. Neaps rise $12\frac{1}{2}$ feet. For time of high water add 5 hours to H.W.D.

NOTE. The rivers Aven and Bélon, though charming, have each the disadvantage of a Bar which shoals. This applies also to the little ports of Méryen, Douélan, and Quimperlé.

Port Tudy (Ile de Groix), though small and often crowded, is convenient and well sheltered. It can be entered at all states of the tide, by craft of a depth not exceeding 10 feet. The entrance is between two moles. In order to clear the rocks get the spire of St. Tudy church in line with the head of the western mole, which will lead clear. Lie afloat in 10 feet L.W. Provisions available. Steamer to Lorient. Spring tides rise $16\frac{1}{2}$ feet. Neaps rise $12\frac{3}{4}$ feet. For time of high water add $4\frac{3}{4}$ hours to H.W.D.

Lorient was intended for France's seventeenth-century East India trade, but has long since settled into somnolence. Port Louis is a fishing harbour, quaint, interesting, and clean. There is a steamer service connecting the two. The

tide runs strongly. A good berth where to bring up is off Port Louis just above the Citadel, between the latter and the jetty. At Port Louis are carpenters, sailmakers, and a ship chandler's. Enter by the West Pass, with Lohic and Kerbel lighthouses in line. The former is the front light and is shown from a house painted with black and white squares at the foot of the South bastion of Port Louis. Kerbel is the rear light and is shown from a white circular tower. When Lorient church steeple comes in line with La Peyrière lighthouse (NNE) steer on these marks, altering course slightly to the westward. In entering leave black buoys to port and red to starboard.

Spring tides rise $16\frac{1}{2}$ feet. Neaps rise $12\frac{3}{4}$ feet. For time of high water add 5 hours to H.W.D.

Port Maria is a small harbour at the southern end of the Quiberon Peninsula, and is conveniently situated if waiting for fine weather through the Teignouse Passage, or if unable to save one's light. It is generally crowded with fishing craft, and entrance should be made under easy sail. A depth of at least 4 to 5 feet will be found, and it is from here that the steamer runs to Belle Ile. Port Maria is well protected in practically all weathers. The leading marks into the harbour are a white tower (80 feet high) in line with another white tower at the end of the SW mole.

Spring tides rise 17 feet. Neaps rise 13 feet. For time of high water add 5 hours to H.W.D.

Le Palais (Belle Ile) is a safe and easy harbour on the North side, but is sometimes crowded with the sardine fishing fleet. Let go anchor and then run a rope astern to the North quay. In bad weather there is a certain amount of "run" in the harbour. Under such a condition it is well to enter the wet dock. The lock gate opens from 1 hour before until high water. There are shipwrights.

Spring tides rise 17 feet. Neaps rise 13 feet. For time of high water add 5 hours to H.W.D.

Crach River. The entrance is not readily discerned by a stranger. The two leading lights in line bear $N\frac{1}{4}E$, but whilst the rear light is shown from a white circular tower, the front light is shown from a white house and is not too easy of discovery. The best identification mark is the high bridge which crosses the northern end of the harbour. Crach River affords a delightful anchorage, being perfectly sheltered from all winds. Bring up just below the bridge in $1\frac{1}{2}$ to 3 fathoms. In entering keep over towards the East side, leaving all black buoys to port. Another anchorage is abreast of **La Trinité** in $1\frac{1}{2}$ fathoms. Provisions obtainable. Carnac can be visited by tram. At La Trinité yachts can be laid up ashore in a shed for the winter.

The current in the river is weak. Spring tides rise 17 feet. Neaps rise 13 feet. For time of high water add 5 hours 10 minutes to H.W.D.

Auray River. The large inland sea known as the Morbihan empties itself through a narrow channel which passes Port Navalo. Opposite Port Navalo, and extending to the NNW is Auray River, which is beautiful but narrow. The various creeks on either side are suitable for exploration in the dinghy. A good spot wherein to anchor is just above Le Rocher, or half a mile below in $1\frac{1}{2}$ to 3 fathoms. It is well to let go anchor in mid-stream and run out a kedge, as there is a 3-knot-tide in the Auray River.

The combined waters of the Auray and Morbihan sweeping past Port Navalo cause a very strong tide which at Springs reaches 8 knots. Whether bound for the Auray or Port Navalo, a yacht should enter at slack water. The stream does not begin ebbing till $1\frac{1}{2}$ hours after local high water: nor does it flood till $1\frac{3}{4}$ hours after low water. In fine weather, if one has arrived ahead of one's tide, there is a suitable

anchorage in the bay SE of Petit Mont, but do not go too far in. Port Navalo lighthouse is a tall white circular tower and stands out as a convenient landmark when coming across Quiberon Bay. Careful regard must be paid to the excellent system of buoys and beacons, but a large-scale chart is necessary. Port Navalo has more than one restaurant but, apart from lobsters, the supplies are limited. French yachts round the jetty, head up to the southward and put out legs ; but it is possible for a small yacht to find in Port Navalo a pool for lying afloat. The Morbihan Sea, with its picturesque islands but furious tides, can be explored though caution and a good chart are requisite.

Spring tides at Port Navalo rise 16 feet. Neaps rise 13 feet. Spring tides at Auray rise 17 feet. Neaps rise $13\frac{1}{2}$ feet. For time of high water add $5\frac{1}{4}$ hours to H.W.D.

Penerf River. If approaching from the East, give Les Mâts Plateau a good berth ; if coming from the West, keep clear of the Plateau de Penvins. The entrance into Penerf should be made by the East Passage, which though narrow is well marked with a depth of 3 fathoms. The approach is made between the red spindle buoy (with conical topmark) at the SW end of Les Mâts Plateau, and the black spindle buoy (with cylindrical topmark) at the southern end of Plateau de Penvins. Now get in line : (1) the conspicuous steeple of Tour du Parc situated on the hill ; (2) the red tower of Petite Bayonelle ; (3) the black tower of Le Pignon. These should bear North by $E\frac{1}{4}E$. Now keep at first 400 yards East of this line, so as to pass quite close to (leaving it to port) the black drum beacon which is situated East of La Traverse. Then bear to port leaving two red beacons and the red tower of Petite Bayonelle to starboard ; but the black tower of Le Pignon and black beacon of Men Drean to port. Next bear to starboard up the channel to the NE, and anchor off Cadenic which is just round the corner beyond the two

red beacons, and affords good shelter from westerly winds. During northerly winds anchor abreast of Penerf in $2\frac{1}{2}$ fathoms. (N.B. Ignore the *red* beacon on La Traverse.)

Penerf supplies little more than lobsters, bread, fruit, milk and butter; but dinner can be obtained at the Inn. The ebb tide pours out strongly, and the best time to enter is with the young flood. Not to be attempted at night or in thick weather. The local people all round here are unsophisticated, courteous, and sympathetic. The harbour is in the nature of a lagoon within a reef.

Spring tides rise 17 feet. Neaps rise $13\frac{3}{4}$ feet. For time of high water add $5\frac{1}{4}$ hours to H.W.D.

Vilaine River is important not merely as affording shelter, but because it is the terminus of those inland waterways by means of which the English Channel at St. Malo is connected with the Bay of Biscay. This passage across Brittany avoids the treacherous NW coast of France, as well as the Ushant neighbourhood. Traversing beautiful, well-wooded scenery, the route is via rivers, canal, and canalized river. There is no difficulty for yachts drawing $3\frac{1}{2}$ feet, but those drawing $4\frac{1}{2}$ feet cannot avoid getting aground now and again. The trip has been done by yachts of 5 feet draught, but there are several places (notably between Rennes and Redon) where vessels of such draught must inevitably stick badly. (For further details see *Through Brittany in 'Charmina'*, by E. Keble Chatterton.)

The entrance to the Vilaine should not be attempted during a SW gale when the ebb tide is sluicing out, as there will then be a dangerous sea on the Bar, which carries less than 5 feet at L.W. Springs. Under conditions of SW gales the pilots do not expect coasting steamers to enter. The tide runs at 3 knots Springs. Off Tréguier, about 2 miles inside the mouth, and on the South shore, will be found moored a number of small fishing craft; but with the

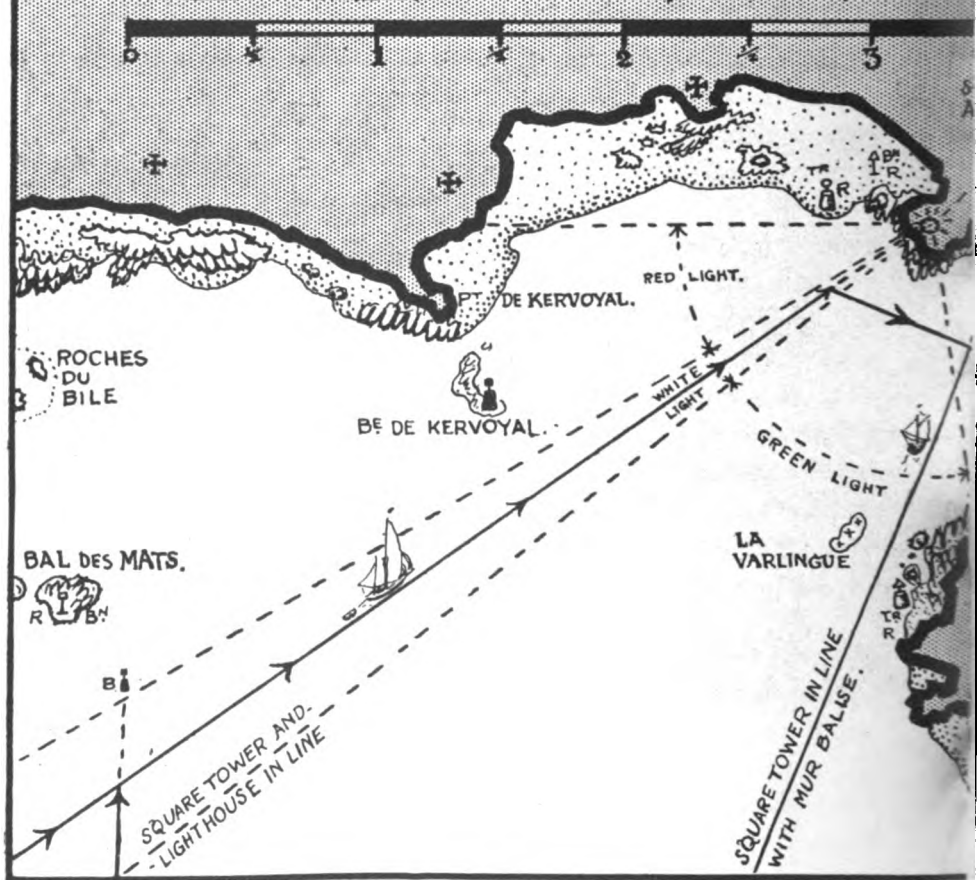
wind NW, especially during the ebb, this is an uncomfortable berth. It is, therefore, advisable to proceed several reaches up the river before choosing an anchorage. There is scarcely any traffic, the river is wide enough for making good tacks, and there is plenty of water. But beware of the shoal just East of Tréhiguier, which is marked by a red gas buoy. Pass to the North of it. About a mile before reaching La Roche Bernard will be seen a red beacon. Leave this to starboard going up river.

The marks for entering the Vilaine are readily seen when once a position has been reached South of Les Mâts Plateau. On a bearing $\text{ENE}\frac{1}{4}\text{N}$ get Penlan light (68 feet high) in line with the ruined square tower of Prières Abbey. (See accompanying Plan.) Note that Penlan lighthouse is a white square tower on Penlan Point. This is on the North side of the Vilaine. But also on the North side is Billiers church tower, which has a curious resemblance to a lighthouse, with which it must not be confused. On the port hand, when entering, all dangers are splendidly marked by buoys and beacons.

Carry on $\text{ENE}\frac{1}{4}\text{N}$ until you see in line the two leading lights at Tréhiguier bearing $\text{SE}\frac{3}{4}\text{E}$. The rear light is in a white square tower 68 feet high ; the front light is in a white square tower 16 feet high. Both are quite easy to pick up. Steer on this bearing, but watch the flood tide which has a tendency to set you on to the South shore. The red beacon tower (with conical topmark) of Petit Sécé is valuable as a mark for warning you off the rocky ledge. Just before reaching the front light, alter course for the light buoy, leaving it to the South.

If compelled to enter the Vilaine during a SW blow and the ebb, it is better to make use of La Varlingue channel. This is much patronized by local craft in all weathers. The channel is not wide, and lies between La Varlingue rocks and Point du Halguen. The marks are the ruined square

VILAINE RIVER ENT

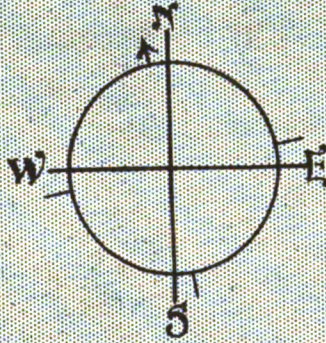


RANCE.

4 SEAMILES.

SQUARE TOWER
ABBAY PPRIERES

OMUR BALISE



PETIT SECE
RED T.

LIGHTS

RED

TREHIGUIER.

tower of Prières Abbey (as before), but in line with the Mur Balise (white wall beacon), bearing NE by North. The red tower (with topmark) off the Pennetin shore is convenient when hugging this side. This channel has 6 feet.

La Roche Bernard is situate on the left bank of the Vilaine, about 10 miles from the mouth. Anchor in the bight with the beacon bearing NNE, and the bold bluff rock (marking the entrance to the harbour) bearing ENE. There is a round red, mooring buoy, but keep well clear to the South of this, as occasionally a ship is here secured. The so-called harbour at La Roche is now little more than a muddy creek, though dinghies can land here at almost any hour of the tide. At high water yachts could go alongside, though it is not desirable. The anchorage mentioned is well protected in all weathers, though the tide at times exceeds 3 knots. The holding ground is tenacious mud. The dinghy can be left at the steps, whence it is only five minutes' walk to the small town. All provisions obtainable, as well as fuel from the garages, where there are motor mechanics accustomed to repair marine engines. An excellent service of motor coaches runs into Nantes. La Roche Bernard has several small hotels.

Spring tides and Neap tides rise as at Penerf. Time of high water at La Roche Bernard synchronizes with that of St. Nazaire, but at Redon it is about 1 hour later.

Le Croisic is a harbour not too easy for a stranger and contains more than one trap : but with care and the accompanying Plan it can be entered with confidence at the right time. The tide pours in and out of this harbour fiercely, but by entering during the last hour of the flood there is no difficulty under this heading. Immediately after high water the ebb quickly gathers velocity. It should be remembered that Le Croisic is an important fishing harbour, comparable in importance with Brixham. Most, but not all, of the

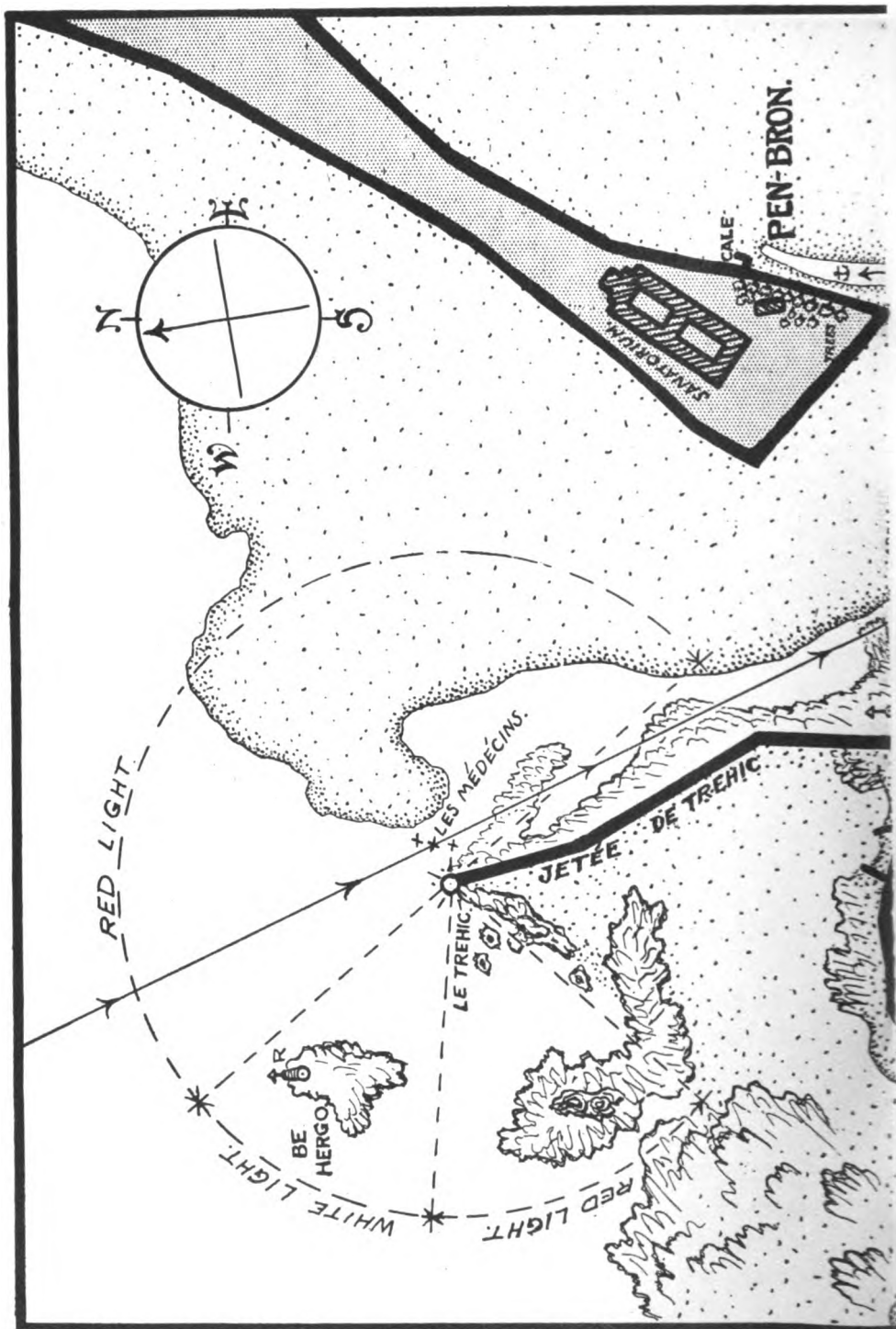
local craft are now fitted with powerful motors. They come in with the flood and let go anchor in Le Poul, or go alongside the quays. Le Poul becomes crowded with the fishing fleet and it is not suitable for a yacht to remain here in the full strength of the tide, which is over 4 knots at Springs.

Although much of the harbour dries out, there is a depth in Le Poul at L.W. Springs of 6 to 8 feet, here and there. If intent on anchoring in Le Poul, advice as to the best water should be asked of the fishermen, who are a fine lot of seafarers. If the fleet is out, get information from the skipper of the motor ferry-boat which plies regularly between the Poissonerie and Penbron. But the best anchorage under all circumstances for a craft drawing not more than $5\frac{1}{2}$ feet is up the Penbron creek. The marks are as follows: Let go bower anchor in line with the West end of Le Croisic church when midway between the first and second gate of Penbron Sanatorium. (See accompanying Plan.) Lay out a kedge to the NE. The advantages of this berth are that the yacht is away from all traffic, there is shelter from the prevailing westerly winds, and that the flood tide in this creek even at Springs is weak, owing to an eddy. Land on the jetty or at the little pier, and take the ferry across to Le Croisic.

The Penbron anchorage is healthy and pleasantly situated, but an easterly gale would be felt at high water. The tide off Penbron runs very strongly during the 4th and 5th hours after high water.

To enter Le Croisic do not let it be later than 2 hours ebb. If approaching from the West give the Pointe du Croisic and the rocky patches NW of the harbour approach a good wide berth. Especially be careful to avoid the Hergo shoal at a safe distance. This lies just off the harbour entrance, but is marked by a red tower with conical topmark.

Now the long jetty of Le Croisic will be clearly seen. Leave it nicely to starboard and steer South by $E\frac{1}{2}E$ for the two leading lights in line. The latter are close to the water at the North



LE CROISIC CHARBOUR.

— HALF A SEA MILE —

POISSONNERIE.

CHURCH

LE CROISIC.

SIGNAL
MAST.

LE POUL.

BE PLATE.

PT MAHON.

PT MAHON.

MAST

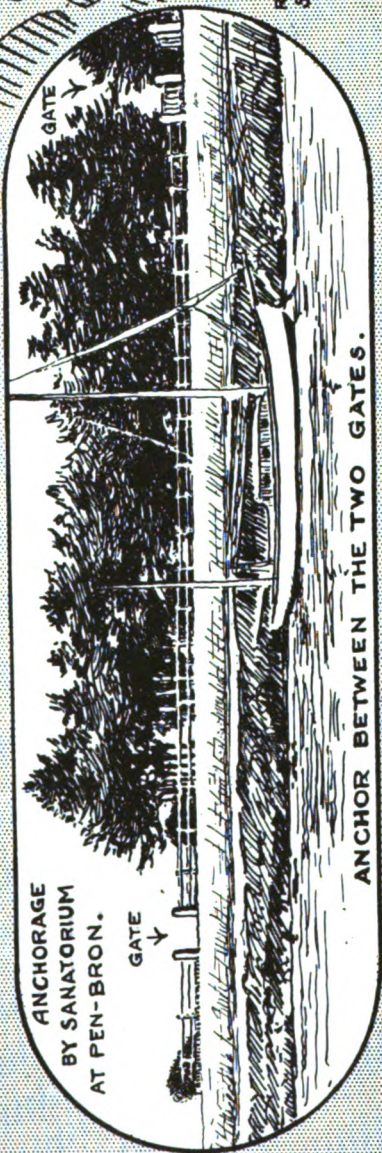
RAILWAY
STATION.

ANCHORAGE
BY SANATORIUM
AT PEN-BRON.

GATE

GATE

ANCHOR BETWEEN THE TWO GATES.



side of Le Croisic, West of Penbron jetty. Watch the set of tide, and be careful to leave to port the two rocks Grand Mahon and Petit Mahon, which are well beaconed. These are nasty traps for the unwary. When nearly up to the leading lights, bear away to the eastward in the direction of a lonely beacon, so as to avoid the tricky expanse of sand which comes further out from Penbron than might be expected.

To enter Penbron creek, alter course to keep the Penbron jetty on the port bow, and avoid getting too close to its extremity as there are nasty stones. Carry on, as shown in the Plan, and avoid getting too far on either side. Use the lead after anchoring, and you will be able to adjust the yacht into the best water by hauling on to the kedge.

At Le Croisic all provisions obtainable. There is a ship chandler's on the quay. There are two yacht yards, several motor firms accustomed to marine engines, and there is an excellent motor coach service to La Baule, St. Nazaire, and Nantes.

Spring tides rise 18 feet. Neaps rise $14\frac{1}{2}$ feet. High water as at St. Nazaire.

Le Pouliguen is very popular among French yachtsmen, but the harbour dries out 6 and 7 feet, so that legs are requisite. It is somewhat crowded in summer. To enter, leave the black conical buoy (with cylindrical topmark) to port. This buoy lies SE of Pen Chateau Point. Leave the Vieille black-and-white beacon (with diamond topmark) to starboard. Enter between the jetties, keeping over to the port side. Beware of strong tide.

Spring tides rise 17 feet. Neaps rise 13 feet.

The Loire has two ports and a number of anchorages. St. Nazaire is about 5 miles from the mouth, and Nantes

about 30 miles. When approaching from Le Croisic neighbourhood, steer $SE\frac{1}{4}E$ from Le Four lighthouse to pick up Le Grand Charpentier. Here the tide begins to flood at 1 hour after it is low water at St. Nazaire. Rate 2 knots. Leave Le Grand Charpentier lighthouse two-thirds of a mile to the North, and the first pair of the Loire entrance buoys should be sighted to the East. There will usually be seen a pilot boat hereabouts, but a further aid is Le Vert beacon which is more than half a mile East by South of these two buoys. (See accompanying Plan.) The entrance is now quite easy. Steer $NE\frac{1}{4}N$ with the Portcé and Kerlédé lights in line. The (unlit) white circular Tour du Commerce is also on this line.

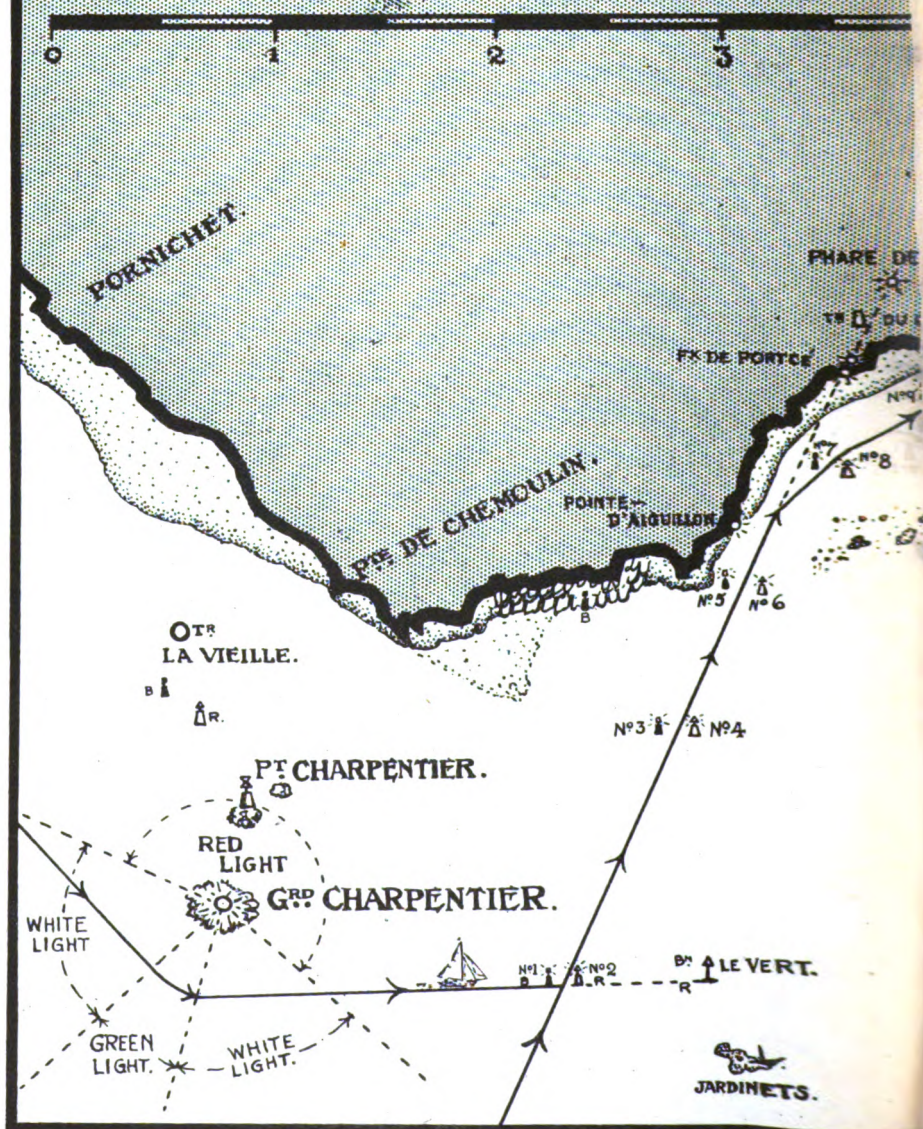
Keep between each pair of buoys, which are lit. Leave to starboard the red-painted buoys which have a green light; and to port the black-painted buoys which have a red light. Having passed Nos. 9 and 10, steer as shown in the Plan, leaving the Tour des Morées well to starboard, and the southern entrance to St. Nazaire harbour will be seen to the North. For small craft it is better to go inside rather than anchor in the roads, for the tide is strong and any wind kicks up a choppy wet sea. Having entered the Outer Harbour, anchor on the West side. If wishing to enter the basin, this can be done from the Outer Port, the gates being opened from 3 hours before till 2 hours after high water. St. Nazaire, though an important shipping place, has few attractions for yachtsmen ashore.

If proceeding up to Nantes, so work it as to carry the whole flood thither. The channel is excellently marked by buoys and beacons. On the way there is good anchorage for small craft off Paimbeuf, SW of the NW end of Ile Carnet. Between here and Nantes it is possible to choose an anchorage in most places just off the channel out of the way of traffic. At Nantes itself a temporary berth can be found near the transbordeur bridge alongside some other craft; but the

GRAND CHARPENTIER

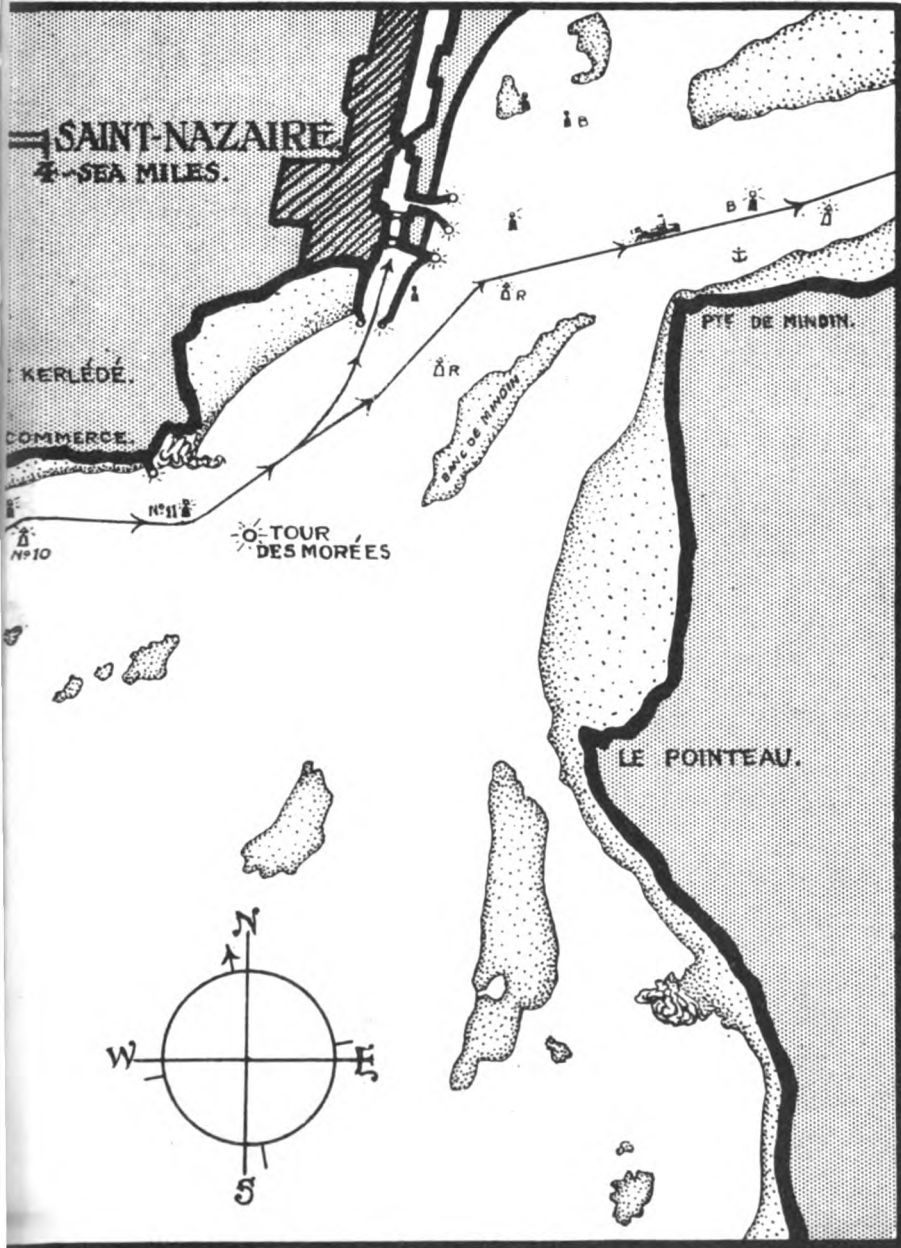


ENTRANCE TO LOIRE.



ENTRANCE BUOYS
N°1 N°2

LE VERT BEACON.



wash from passing traffic is the cause of some discomfort. There are several yacht yards at Nantes, as well as motor mechanics, sailmaker, and all supplies. If intending to proceed via the canal to Redon, the mast must first be lowered. Make sure by inquiry that there is enough water.

At St. Nazaire Spring tides rise 17 feet. Neaps rise $13\frac{1}{2}$. For time of high water add 4 hours 36 minutes to H.W.D. If wishing to enter St. Nazaire by the east side at low water, secure temporarily alongside either jetty and wait till east lock opens.

NOTE. The general appearance of the Loire mouth, with the line of buoys, has been sketched in the accompanying Plan. This is not a pleasant place for a small yacht to be caught in a westerly gale with the ebb coming out, and fog is by no means rare. The best time for entering, if bound only for St. Nazaire, is during the last $1\frac{1}{2}$ hours of the flood. (If navigating the Loire to Nantes, obtain the French official chart No. 5456, issued by the Service Hydrographique de la Marine.)

Pornic Harbour should not be used except for special reasons. It is a quaint little town, and has an excellent climate; but the harbour dries out, and is exposed at tide time to swell. The seas come right over the pier and break at the entrance during fresh westerly and SW winds. Legs are necessary if remaining during low tide. This is a pretty place and visited by local yachtsmen.

Spring tides rise $17\frac{1}{2}$ feet. Neaps rise $13\frac{1}{2}$ feet. For time of high water see St. Nazaire.

Bois de la Chaise off the East end of Noirmoutier Island is a more suitable anchorage in winds between NW and SW through W. It is a beautiful place, with good holding ground in muddy sand, and is convenient in fine weather when waiting to pass South inside Noirmoutier Island.

The latter is joined to the mainland by a causeway, and is fordable at low water. As the sands dry 10 feet, and Spring tides rise 17 feet, it is possible at top of high water Springs for small craft to hurry across here, and then anchor off La Fosse pier in $1\frac{1}{2}$ fathoms. Tide very strong. (Spring tides occur at 3 hours 40 minutes Full and Change.)

Port Breton (Ile d'Yeu), now called Port Joinville, is picturesque and owns two hotels. Small craft drawing 5 or 6 feet may anchor in the Outer Harbour and keep afloat at dead Neaps, but expect many fishing vessels. The Inner Harbour dries out generally 5 to 8 feet (mud and sand), but the best berth is at the South end of the Great Quay where it dries out 1 to 3 feet. Otherwise anchor off the harbour entrance in about 2 fathoms, but exposed to easterly winds. Mooring buoy in Outer Harbour has 5 feet at Neaps; but in easterly winds the keel of a yacht's stern will tail on to a bank immediately west of buoy and dry. Garage. Blacksmith. Shipbuilder. Spring tides rise 15 feet. Neaps rise $12\frac{1}{2}$ feet. For time of high water add $4\frac{1}{2}$ hours to H.W.D.

St. Gilles sur Vie. The best time to enter is just before high water, for at its strongest the ebb rushes out at 6 knots during Springs. The flood is less strong. This is a fishing harbour, which dries out. A yacht could berth inside along the quay, the bottom being mud: or she might secure alongside a local craft. But St. Gilles should not be used unless necessary, Les Sables d'Olonne being preferable. There is a temporary anchorage outside, to the SW of the harbour entrance in 2 fathoms, but this is subjected to a wearisome roll even in NW winds, and dangerous in onshore winds. The tide is weak at this anchorage.

Spring tides rise 17 feet. Neaps rise $13\frac{3}{4}$ feet. For time of high water add $4\frac{3}{4}$ hours to H.W.D.

Les Sables d'Olonne consists of an outer port and a wet dock. The gates of the latter are opened about $1\frac{1}{2}$ hours before until high water. But this dock has a depth of 10 to 11 feet. At the East end of the outer port there is, however, room for small craft where they can lie afloat at all states of the tide, the depths at L.W. Springs here varying from 5 feet to about 7 feet. Let go an anchor at the bows and then run a stern line on to the quay. Expect to find the place fairly crowded with fishing craft. The best time to enter is at high water, since the approach to the above berth dries 6 feet in places. Beware 5-knot current when sluice gates open for 2 or 3 days.

Les Sables d'Olonne's outer port and wet dock are situated at the northern end of a long and narrow channel between two piers, where there is a least depth of 1 foot at L.W. Springs. The entrance should not be attempted when there is a heavy onshore wind. In fine weather there is a very pleasant anchorage off the plage under the lee of the western breakwater in 2 fathoms. All the attractions of a seaside resort. At night the leading lights are somewhat mixed up with those of the plage.

There are shipbuilding yards where any repairs can be done, sailmakers, motor mechanics, forges, ship-chandlers. Drinking water is laid on to the quays. All supplies available. Spring tides rise 16 feet. Neaps rise 13 feet. For time of high water add $4\frac{3}{4}$ hours to H.W.D.

St. Martin (Ile de Ré). There is a strong current off the mouth of this harbour, whose approach and entrance dry out. The best time to enter is just before high water. Lower sails and motor through the gates into the basin. Except alongside the West quay there is a depth in the basin of $4\frac{1}{2}$ feet. The latter leaks slightly, but is quite clean and otherwise pleasant. A good berth is found alongside the quay to port. If waiting for the gates to open, secure temporarily in the cut.

Spring tides rise 20 feet. Neaps rise $15\frac{3}{4}$ feet. For time of high water add $4\frac{1}{2}$ hours to H.W.D. Steamer to La Pallice and La Rochelle.

La Pallice consists of an outer harbour and a wet basin. The former has a depth of 16 feet. Secure to a buoy in the outer harbour in the NE angle (though there may be other craft using the same). There is usually an inconvenient ground swell setting into this unattractive and desolate port, and a strong tide rushes past the entrance. Even if making a short stay, it is better to pass into the basin, which has a depth of 13 feet, and can be entered during the half hour before high water ; also when the lock is opened for other vessels. Choose quiet berth in SW corner of basin.

Spring tides rise 18 feet. Neaps rise 15 feet. For time of high water add $4\frac{1}{2}$ hours to H.W.D.

La Rochelle is an attractive old town with fortifications and towers, and usually full of fishing craft. In approaching, pick up Richelieu Tower beacon, thence keep in mid-channel. The Outer (Trawler) Basin has a depth of many feet ; and the Inner or Old Basin has about $4\frac{1}{2}$ feet close by lock entrance ; but best berth is within Yacht Basin, 17 feet deep. The lock gates are open from $1\frac{1}{2}$ hours before till $\frac{1}{2}$ hour after high water. The best time to enter La Rochelle is just before high water. All provisions, stores, sails and repairs procurable. Spring tides rise 19 feet. Neaps rise $15\frac{1}{4}$ feet. For time of high water add $4\frac{1}{2}$ hours to H.W.D. Yachts can be laid up at La Rochelle.

River Gironde. When approaching from the north it is practicable to pass inside Ile d'Oléron through a well-buoyed yet very tricky channel, shallow and sinuous ; coming into the Atlantic again through the Maumusson Straits. This is an unpleasant place in fine weather, with breaking seas ; the channel and corresponding marks are frequently changed,

so that even the latest French chart may be out of date. In bad weather to enter or leave by Maumusson mouth is to court disaster. Having come out of here in fine, settled, but not hazy weather, any yacht drawing up to 12 feet will have no difficulty in keeping a couple of miles from the shore whilst bound South, and, after passing Pointe de la Coubre lighthouse rising 210 feet from the low-lying sandy coast, will then pick up the line of buoys leading into the Gironde.

It is infinitely preferable to come outside Ile d'Oléron. Make for the Matelier buoy, which is $6\frac{1}{2}$ miles WNW of the Grand Banc bell buoy. At this distance from the mouth it is very often impossible to see any land objects. For a low-powered yacht, a good time to be at the Matelier buoy (bell and whistle) is about 2 hours after L.W. Cordouan Lighthouse, and thus you will carry the flood well up this wide river. But be very careful to allow for the north-setting tide between the Matelier and Grand Banc buoys, especially in thick weather, or you may get ashore near Pointe de la Coubre which has been the graveyard of much shipping.

The Pointe de la Coubre lighthouse (see sketch) is sometimes fog-invested except as to its upper portion, which will be identified by a black mark. Be most cautious to avoid the sandy peninsula which is yearly shoaling at both sides, but within it lies **Bonne Anse**. The tide, even at Neaps, sweeps past at 3 or 4 knots, but as its name indicates Bonne Anse does afford good shelter. By cautious use of the lead in preference to trusting the chart, a vessel of 6 ft. draught could work her way in and find safe anchorage at the north-western corner, where also is a restaurant. If once inside this bay, it would be possible to ride out almost any gale. Before it silted up so badly, Bonne Anse was frequented by the pilots, but a few French yachtsmen still use it.

The Gironde mouth should never be attempted by even moderate-sized yachts in hard westerly winds; but if so compelled by force of circumstance, wait till the last hour of

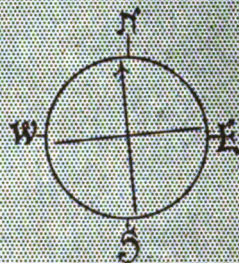
the flood. The sight of the seas breaking over the shoals, with wind blowing against the ebb, is a terrifying spectacle. Even during fine weather some curious steep waves are sometimes found at the mouth. One day out of every twelve is foggy, but when once past Cordouan lighthouse, 197 feet high and a very substantial affair, a careful compass course even in hazy weather would bring you to **Royan**. The harbour dries out, the tide sweeps past with great strength, but there is a depth of 6 feet alongside the pier where a small steamer may be lying. A yacht with legs could lie comfortably at the inner harbour. If anchoring, choose a berth just East of the outer pier, using the lead and getting in so far from the current as possible. Even then this is a not too pleasant berth, being exposed to winds from NW through West to SE.

A much better berth is on the opposite side of the river just to the South of **Pointe de Grave**, which will be identified easily by a tall, plain, War Memorial. Look out for a pontoon which is used by the Royan ferry steamers and anchor to the southward but inside some pilots' mooring buoys. Except in northerly winds (when Royan is preferable) this is a capital spot if waiting a tide, with good shelter from all westerly winds. It is, however, rather deep (about 6 fathoms) and the tide is fairly strong, but by feeling your way as near to the land as possible a tolerable berth can be found. Slightly further South still is the tiny artificial harbour of **Port Bloc**, which is very safe, but suitable only for vessels that can take the ground at low water.

The two best anchorages of all lie less than a couple of miles further up river on this same southern shore. **Port Verdon**, with an artificial breakwater at its eastern side, will be readily identified. It has plenty of water for any yacht, but beware of the furious tide past the entrance. Go right up to the extreme southern end. Port Verdon was completed in the year 1933 and intended for liners. Provided

THE RIVER GIRONDE. FROM THE SEA TO THE FIRST- LOCK PAST BORDEAUX.

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200



PHARE DE LA COUÛRE
PTE DE LA COUÛRE
BORNE NOIRE
ENLARGED DETAIL OF PHASE DE LA COUÛRE
ROHAN
CORDON L' H

ST-JEAN
MARCAIS
ST-JULIEN
BLAYE

BORDEAUX

GIRONDE RIVER

CASTETS
LEON
CAYAN



GARAGE MARITIME, POINTE DE JOUR, BORDEAUX.

the wind is not fresh from South through East to North-East, the most suitable yacht anchorage for a night is immediately past Verdon's breakwater and in the shallowing bay of **Pointe de la Chambrette**. Go well in till nicely out of the tide—but not too far. There will probably be a fleet of small craft at moorings. Let go short of them in $3\frac{1}{2}$ fathoms at half flood. A nice, clean, quiet berth on most occasions, and patronized by local French yachtsmen.

Bordeaux is 60 miles from the sea, but a 5-knot vessel can reach that port from La Chambrette in one tide, the distance being 46 miles. The shoals are excellently marked by buoys and lighthouses, to which strict attention should be paid. Going up-river leave all red buoys, and all light buoys showing green lights, to starboard: leave all black buoys, and all light buoys showing red lights to port. Remember that there is no slack water following high tide, but that the ebb immediately begins with a velocity of about 5 knots at Neaps. During Springs it runs at 7 knots in places. Mirage is sometimes troublesome when trying to locate a buoy ahead.

Half a dozen small harbours or creeks will be found after quitting La Chambrette, but they dry out at low water and are used chiefly by the wine barges. Off Pauillac it is possible to anchor and go ashore for stores, but the holding ground is not good. Further up, where the Dordogne River joins, the navigation becomes intricate. Keep well up to the northern bank here and pay strict regard to the buoys.

At Royan, Spring tides rise $16\frac{1}{2}$ feet. Neaps rise $13\frac{1}{4}$ feet. For time of high water add 4 hours 40 minutes to H.W.D.

Bordeaux. This historic port is badly supplied with anchorage facilities for small craft. The docks are dirty and undesirable, but there is one tolerable anchorage, and one quite good berth as well. On the right bank just below the bridge a yacht could anchor and find peace; but the tide is so strong that dinghy work is barely possible. Actually the

only satisfactory spot is within the Garage Maritime at **Pointe de Jour**, 2 miles below Bordeaux on the western bank opposite Lormont.

Coming up from the sea, and having got beyond Bassens, keep a lookout for a pontoon enclosure on the starboard hand, where you will see a cluster of yachts. Entrance is made through a gate but only at the turn of tide, after which the opening is closed. On the flood you enter through the up-river (southernmost) gate ; and vice-versa. The down-river entrance is seen on the accompanying sketch at the apex by a sentry-box. But a stranger had better make straight for the outer pontoon, put plenty of fendoffs alongside (because of the wash from passing steamers), and wait till the tide is done. Then hurry inside. Here you secure bow and stern to A-shaped iron struts, fixed to the pontoons and working vertically but not horizontally. Because of the swift-changing current and narrowness of these pens there is little time to waste in securing ropes. The garage is private property, and the charge is only a few francs daily. It is perfectly safe to leave a yacht unattended, and a builder's shed is adjacent for repairs, hauling out, scrubbing. Water is laid on for replenishing tanks. A walk of ten minutes brings you to the tram terminus, whence Bordeaux city is soon reached. Here ship-chandlers and motor mechanics are to be found.

At Bordeaux, Spring tides rise $16\frac{1}{2}$ feet, Neaps rise $12\frac{3}{4}$ feet. For time of high water add 2 hours 50 minutes to high water at Royan. In going up river to Bordeaux the flood will be carried for an unusually long period, whilst, in descending, the ebb tide will be shorter.

CHAPTER XIII

(FOREIGN SECTION PART III)

CANAL LATÉRAL DE LA GARONNE ; AND CANAL DU MIDI

Bordeaux to the Mediterranean by Inland Waterways. For a yacht drawing not more than $5\frac{1}{2}$ feet, of a height above water-line less than 8 feet 11 inches, an overall length not exceeding 90 feet, with masts capable of being lowered, it is practicable to reach the Gulf of Lions in about a fortnight, provided the vessel has her own mechanical power. The distance from Bordeaux to Les Onglous is about 300 miles, and there are 118 locks, but some of these are double, triple, quadruple, and even sextuple. At Les Onglous you enter a large lagoon, Etang de Thau, and after a dozen miles reach Sète. Pass through this town into the port, and you are at the Mediterranean.

Reference to the accompanying plans will indicate the route from Atlantic to Marseille, and the following instructions will enable the yachtsman to proceed with confidence.

Leave Bordeaux with the young flood for Castets, which is another 33 miles up the river that is very tricky. Those who lack self-confidence may hire a pilot : others will use all care and follow in the wake of the motor barges, tugs, sloops, etc., which will begin the ascent with the first flood. After passing under Bordeaux' two bridges, you will see ahead an island (like a Thames eyot). Here sound carefully with the lead, or stick, and work over as close to the western shore as ever you can go, almost touching the bank. Both this and the next island having been left well to port, you can

now edge out into mid-stream and pass the third island to starboard.

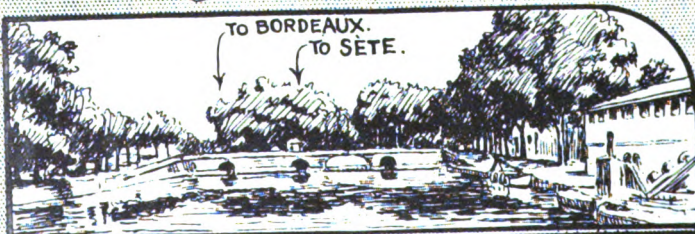
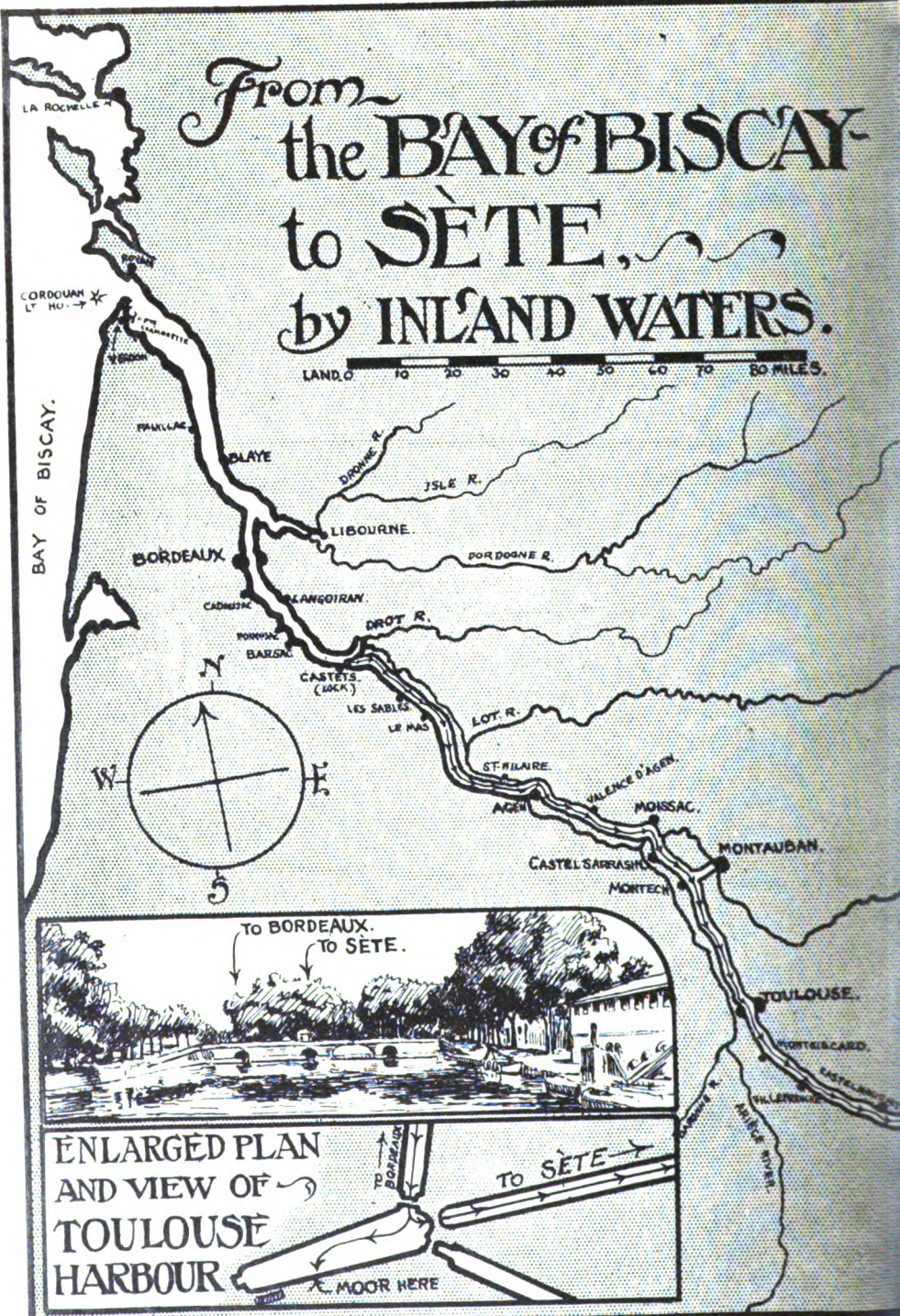
Thence follow the river's bends, keeping well away from either bank, and occasionally you will be aided by a tall leading light. When passing under the high bridges of Langoiran and Cadillac, keep close over to the port side (i.e., the North-East shore) and resume sounding again. The trickiest section begins before reaching Langon. Proceed dead slow, sound continuously, and avoid cutting off corners. Beware of some dangerous wooden groynes, which extend much further towards mid-stream than would be expected. At low water they are readily seen, but from half tide may not easily be discerned. At Langon bridge get right over to the starboard side, look out for some inconvenient stones, scrupulously avoid getting ashore in the narrow channel, and if ahead of your tide expect to find a strong stream against you. When in doubt, follow just astern of a motor barge.

The river now widens, but the channel whilst at first hugging the port side keeps twisting from one bank to the other. Finally there will be seen a railway bridge ahead, and then the Castets lock-gates. There is a choice of two locks, and, if one is open, accelerate speed to rush in athwart the strong stream. Should the gates be closed and your engine be reliable, jog about till the *éclusier* opens the lock and waves you on : but if the engine may possibly stop, let go anchor and bring up, though well clear of traffic emerging.

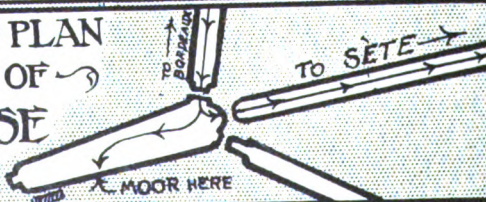
In Castets lock, as in many others, will be found vertical iron rods through which to pass mooring ropes, enabling ship to be kept close alongside whilst the water rises or falls. There is a tendency for the lock-keepers to let water rush into most of these locks with undue haste. Unless warps have been properly secured, and fendoffs trimmed, damage might ensue. A request that the water may be poured in "*doucement*" is generally respected. These officials will be found throughout France courteous and helpful, though they

From the BAY of BISCAY to SÈTE, by INLAND WATERS.

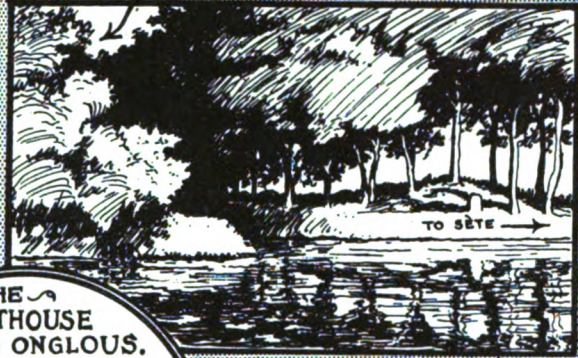
LAND 0 10 20 30 40 50 60 70 80 MILES.



ENLARGED PLAN
AND VIEW OF
TOULOUSE
HARBOUR



TO THE LOCK AT AGDE.



THE
LIGHTHOUSE
AT LES ONGLOUS.



WHERE
CANAL ENTERS
ETANG DE THAU.
MONT DE SÈTE
IN DISTANCE.

WHERE CANAL JOINS RIVER HÉRAULT,
NEAR AGDE ON WAY TO ETANG DE THAU.



MEDITERRANEAN.

may not be over-pleased if you reach a lock about the time of their midday meal. Most of them are old soldiers who lost a leg in the War, but often the gates will be opened by their female relatives. It is customary to give a tip of two or three francs—not more, except for some special service—at each lock.

You are now in the **Canal Latéral de la Garonne**, and at the second lock must show your official permission for navigating these waters. Wherever you see “Bureau de Declaration” announced at the lock-side, be ready with this document. At this and all other *écluses* it saves considerable delay if you have a slip of paper ready to hand up, giving the following details: “Nom du Propriétaire,” “Nom du Bateau,” “Domicile,” then adding your destination “Bordeaux à Sète.”

The most suitable fendoffs are old pneumatic tyres, which will have been obtained at any garage in Bordeaux. Ordinary yacht fendoffs are too slight for rubbing against so many lock-sides. On this canal, when going south, there is always a little stream against you which needs watching just as you are about to enter each lock. Often this current is enough to catch a vessel's bow and push her with force against the masonry: therefore keep plenty of way till just within the gates, then give the engine a kick astern and be smart with the mooring ropes. If short-handed, have a bowline ready at the end of your stern warp, and drop it over the bollard or on to the lock-keeper's arm. The distance in kilometers to the next lock will be noticed above each *éclusier's* house, and this is a great convenience.

The best mooring places in villages or towns are usually alongside a stone quay; but if bringing up for the night elsewhere, boom out the yacht from the bank by means of two poles, for the water shoals at the sides. At the little towns of **Agen**, **Moissac**, **Castelsarrasin**, it is possible to obtain supplies, oil fuel, lubricants, hot baths; and in almost every

village will be found at least one garage with an efficient mechanic. At Agen the quay is abreast of the railway station, quite clean, and very convenient for shopping. At Moissac there is another excellent inland harbour, but at Castelsarrasin the basin has been allowed to silt up with mud. A mooring place here is difficult to find, but a moderately satisfactory spot is abreast of the railway station just past a footbridge. Boom well out from the bank, show a riding light, and tend ropes whilst traffic comes past.

At **Toulouse**, 120 miles from Castets the Canal Latéral de la Garonne ends, and the **Canal du Midi** begins. From the former you suddenly find yourself in a kind of immense swimming-bath. This Toulouse Embouchure, or Harbour, is the best place in which to moor. On reference to the plan and sketch, it will be observed that there are three arches. Enter by one, and follow direction over to the other side for mooring opposite to a petrol depot. Trams run from the bridge every few minutes into Toulouse. When leaving this basin, proceed by the middle arch, the white circular space in sketch being a group of sculpture.

You have now about 150 miles before reaching Les Onglous. The first few kilometers of the Midi Canal are not attractive. They pass the city's outskirts by warehouses and factories, and will need a couple of hours to negotiate before quitting this section with its four tedious locks. At **Port St. Sauveur**, there is plenty of quay space, and this harbour (though less secluded than the Embouchure) is not too bad if stopping a while to take in stores; for the tram is adjacent, and soon whisks you into the shopping centre.

Both this and the previous canal will be found exceedingly beautiful in the scenery, with innumerable charming resting-places outside towns or villages. There is never much difficulty in obtaining groceries, wine, fruit, meat, petrol

and paraffin. If running short of drinking water, an *éclusier* will be courteous enough to let you draw from his cool well.

In the **Segala** neighbourhood you no longer ascend ; but, having passed the watershed, the labour of locking is much simpler and quicker. On the average, each lock from the time of entering to leaving, wastes about fifteen minutes, but this is multiplied when the lock is double and perhaps sextuple ; or if you must wait till a barge has come through. As in the Dutch canals, so down here, the danger is one of collision with other traffic. Horse-drawn transport is almost gone, but there is a good deal of traffic by the motor *chaland*s which carry petrol or wine barrels. Sometimes you may go on for most of a day without seeing one vessel : then quite suddenly a big barge appears, and occupying considerable space. This Canal du Midi was never designed for mechanically propelled craft. It is so full of sudden twists and bends, and many of the bridges are placed at such an angle, that you frequently cannot see round the corner. The utmost caution should thus be taken always to ease down, blow your fog-horn, and assume that all blind corners are dangerous until proved clear of oncoming traffic.

At the town of **Castelnaudary** all supplies are conveniently available, and there is good berthage alongside the stone quay or on the rush-limned lake ; but, before leaving here, it is well to advise the *éclusier*, as there follow four interconnecting locks which have to be traversed. To wait till an ascending barge came through would be to lose valuable time. At **Carcassonne** bring up near the railway station just short of the lock. This harbour may be fairly crowded, but a berth will be found alongside one of the barges.

Homps can be recommended as an excellent stopping place, very clean and rural, with a pleasant quay, and the

usual village shops for simple stores as well as oil fuel. Soon after leaving Homps there is a 30-mile run without any locks until reaching **Fonserannes**, which is just outside **Béziers**, and a ladder of six locks must be descended. If compelled to wait for an ascending barge, moor to the quay on the port hand at the top, close to the lock.

The lock-gates are open at 1 p.m. for down-going traffic. Other times will be found on inquiry from the lock-keeper.

If staying a while in **Béziers** itself, secure alongside the quay in the Port Neuf. All stores, and even repairs to hull, are obtainable here. **Béziers** is quite a considerable town with some first-class shops, and presently you come to **Agde**, first by passing through a circular lock, thence up a narrow cutting which abruptly enters the broad River **Hérault**, as shown in the accompanying plan. (See inset.) A capital clean berth, with six or seven feet alongside, will be found by steering straight across the **Hérault** to the opposite side, some distance short of the railway bridge; but, because of the weir, do not go too far down stream.

To reach **Les Onglous** go in the other direction: that is to say, after coming out of the narrow cutting between the trees (indicated in the sketch) turn sharp to port and then take the first turn to starboard. Soon you will pass through the last lock at **Bagnas** and gain **Les Onglous**, which is at the South-West end of the lagoon known as **Etang de Thau**. The circular sketch shows this entrance with jetty and lighthouse. Here end the 365 miles from the Atlantic, and once more you are on salt-water. Allowing for occasional delays it is possible to do the journey comfortably in sixteen days.

If desired, a yacht could remain long enough inside **Les Onglous** jetty to hoist masts, and sail across the 12-mile lagoon. In the distance will be seen **Mont de Sète**, which must be left to starboard. Out of **Etang de Thau** you pass

by an isolated rock into **Etang des Eaux Blanches**. It should be mentioned that in both of these a very nasty short sea is soon whipped up, so that it is better to leave Les Onglous in a condition more suited for open water than for inland canals. Be especially on the lookout for Mistral, which blow up suddenly from about NNW and usually last three, six, or nine days, with slight intermissions. Whilst in the centre of Etang de Thau there are several fathoms of water, this lagoon is unmarked, it is easy to get ashore some distance from the land but not so easy to get off, by reason of the practically tideless Mediterranean. The lead should, therefore, be kept going, a course in the centre maintained by compass, and at the first tendency to shoal get still further towards the middle.

In **Etang des Eaux Blanches** will be found 4 fathoms, the line of buoys having been laid for bigger ships. A stranger may well be puzzled now as to direction. On the eastern side is the entrance to that **Canal du Rhône**, which enables a yacht to carry on up to Beaucaire on the River Rhône, thence South to Port St. Louis and so out into the Mediterranean; or, after traversing Arles, continuing by another canal via Port de Bouc, the Rove tunnel, and so all the way into Marseille from Bordeaux without once using the sea-route. Given enough mechanical power to stem the rapid-running Rhône, it would even be possible to go North by Avignon and Paris to the English Channel at Havre.

By the time this Etang des Eaux Blanches is reached, most yachtsmen will have had enough of canal locks, and prefer the sea-route. Therefore look out for the opening, which will lead through the town of Sète. This opening is not easy to discern, and lies at the south-western end of the above Etang des Eaux Blanches. It can be identified by the little round building (see sketch) resembling a miniature light-house (shewing a green light after sunset), alongside a tall

square building which is the Zoological Museum. Leave both these to starboard, and you enter a lockless Venetian-like canal which runs from North to South through Sète into its sea harbour. Immediately to the West of the Zoological Museum is a bay with plenty of water and a good anchorage from westerly winds, but too exposed during Mistrals. Here also is an excellent shipyard with an electrical slipway, where any repairs can be made.

(For further details as to Sète, refer to the next chapter.)

(A descriptive account of these canals will be found in "To the Mediterranean in 'Charmina,'" by E. Keble Chatterton.)

CHAPTER XIV

(FOREIGN SECTION PART IV)

MEDITERRANEAN : SÈTE TO TOULON

Sète. In order to pass from Etang des Eaux Blanches in the north to the Old Basin at the southern end of this port, five bridges must be negotiated. The first is a considerable double-track railway ; and the second is a big road ; under each of which most yachts *with mast lowered* could pass readily, but not otherwise. Both of these bridges are controlled by the station authorities, and are opened at definite times for a few minutes on special demand, but without any charge being made. Apply to the man in the signal box, who will tell you the assigned hours. They are opened, for instance, at 7 a.m. but not after 4 p.m. It is necessary to be punctual absolutely. If a yacht with mast erected should arrive after 4 p.m., and the Mistral be oncoming, the best berth is in a tiny bight on the western side of this canal a stone's throw north of this railway bridge. Usually there will be found an obsolete barge : if so, moor alongside her for the night and have the bridge opened next morning.

The other three bridges—see accompanying plan of Sète—are opened quickly at any time of the day in response to your fog-horn, which should be kept blowing when about a hundred yards distant. You will then see the official holding up the road traffic, and the bridge swing open. Keep an eye lifting for the busy procession of tugs and motor barges, which keep passing up and down. The quays on either side abreast of the warehouses are all thick with vessels loading or unloading. There is also a curious current at times,

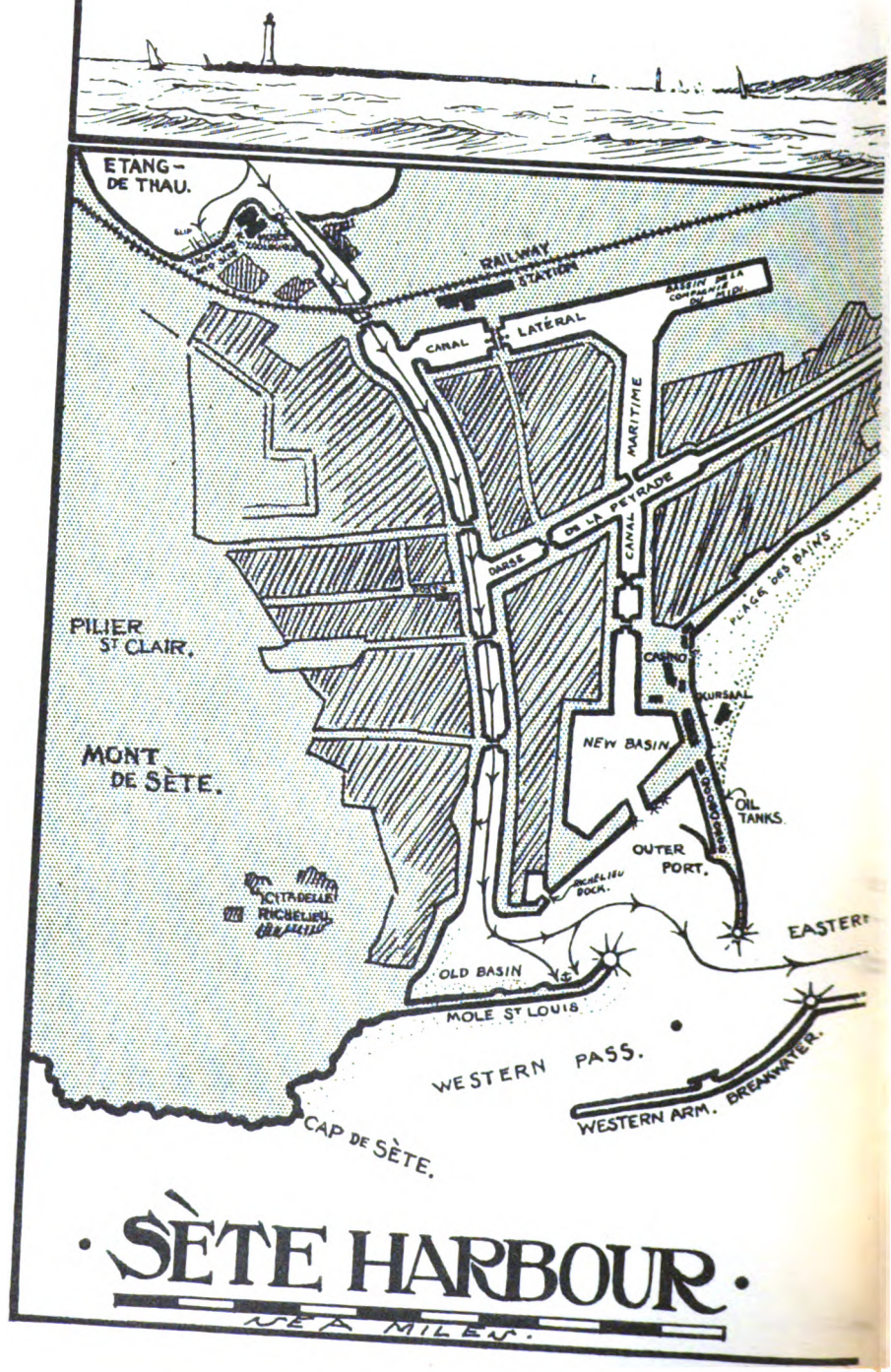
depending for its direction as to whether the wind is northerly or from the south.

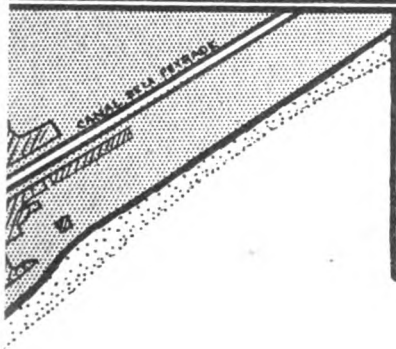
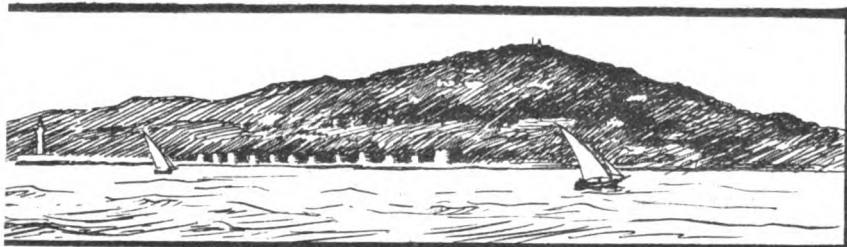
Just immediately below the fifth and last bridge, on the western side, is the best berth for a yacht stopping only to take in supplies, visit the Post Office, call at the Bankers, or obtain new ropes from a first-class yacht-chandler's on the east side close to this bridge. But do not secure at the eastern quays, which are used for berthing steamers. Most yachtsmen will prefer to bring up in the Old Basin, a good berth being shown in the plan under shelter of the massive Mole St. Louis. Choose a vacant spot just east of the pilotage, let go anchor, and run a stern line out to the quay. Here is a depth of 2 to 4 fathoms as compared with $1\frac{1}{2}$ to $2\frac{1}{2}$ fathoms in the Sète canal. At the extreme western end of the Old Basin are both the private enclosure, and special slipway, of the local Société Nautique. If a small yacht had to be left for a few weeks, this would be the corner where she could be looked after till her owner's return. Drinking water can be obtained at the corner of Richelieu Dock. A yacht having come through the canals from Bordeaux, and wishing to have her *triptyque* stamped by the *douaniers*, will find the Customs House on the eastern side of the above-mentioned local canal—between the southernmost bridge and the Old Basin.

Small yachts should not put to sea from the Old Basin's security during unsettled weather, the Gulf of Lions being notorious for its treachery, with very few harbours wherein to find refuge. Hard winds have a habit of springing up with surprising suddenness, and a nasty sea soon makes. Not even the pilots and local fishermen are infallible weather prophets, though their advice should be welcomed. Moderate sized yachts would be foolish to tackle the Gulf of Lions during doubtful conditions, but the following advice is proffered as being in accordance with prudence.

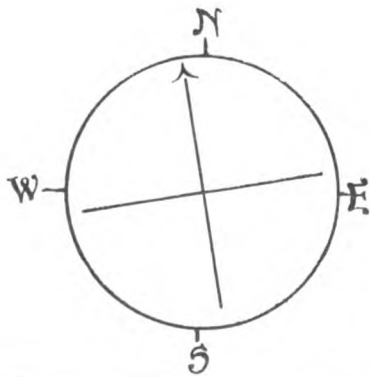
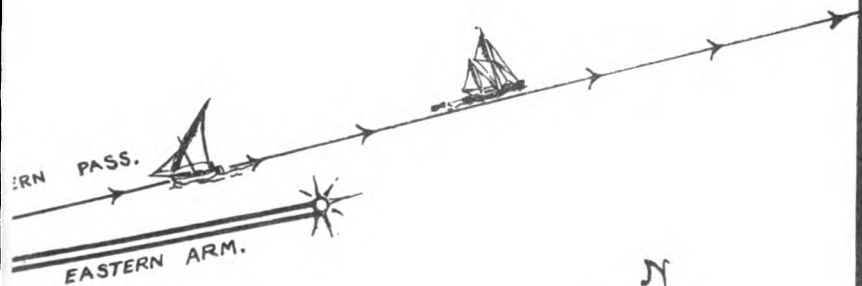
When you see a curious clear sky just above the mountains

VIEW OF SÈTE ENTERING FROM THE SEA BY EASTERN PASS.





VIEW OF ENTRANCE TO
CANAL AT SÈTE FROM
ETANG DE THAU.



at the North, be cautious. This may be the precursor of a Mistral. Perhaps the safest time to cross this Gulf is just after the Mistral has concluded his three, six, or nine day spell. Do not put to sea when the wind is SE, but if, when you are out, it should shift to that direction with ominous swell, haze, and falling barometer, waste no time and make for the nearest harbour. It is a long drag for even a 20-tonner of low power bound from Sète and Marseille, but there are two quite good and safe harbours in between, which deserve to be known better and more frequently be used by yachts on passage. These are Grau du Roi ; and Port de Bouc.

Grau du Roi. This is a capital little fishing port lying 20 miles E by N from Sète and quite easy of access, provided due care is taken. The appearance from seaward will be noted in the accompanying sketch. When some distance from the land you will first sight a cluster of houses above the dunes, a tall but obsolete lighthouse on the north side yet on land ; two jetties with each a smaller round lighthouse at the south-western ends ; whilst three miles away to the southward is Espiguette square light tower rising up from the dunes. When making this land, there will be noticed a certain similarity to the Belgian coast.

Be careful to steer midway between the two jetties, and on no account beat in ; for at the south side, especially, it is shallow with rocks and stones.

By keeping in the centre you will find a depth of 10 feet, and right ahead will be seen the swing bridge. Do not go quite so far, but select a berth either alongside one of the local fishing tartanes, about three-quarters of the way up, or at one of the vacant stagings on either side. The first of these on the port (north) side near the obsolete lighthouse is used by a vessel which arrives with a cargo of oil. In her absence and provided a fresh SW wind is not blowing, this is a fair berth for a yacht of 4½ feet, though it were better to

go further up, even if it means mooring two or three deep from the shore. For thus you will get plenty of water, and there is practically no traffic under the bridge and no current. A stranger would be wise to go alongside one of these trawlers before seeking another mooring place.

Grau du Roi is open to the SW, but it is seldom that south-westers blow and, in any case, the scend would not come right up. The people are kindly disposed, prices are not high, hot baths can be obtained at the hotel on the south side. All provisions, oil fuel, etc. and motor mechanics available also on the south side. Grau du Roi is a quiet seaside resort, with good bathing and fishing.

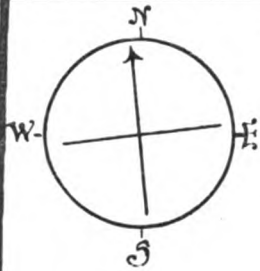
Take the dinghy and row 4 miles up to the mediæval ramparts of **Aigues-Mortes**, though the salt marshes exhale unhealthy fumes.

NOTE. The canal from Sète to the Rhône flows through Aigues-Mortes. Thus a yacht could come this way, either by lowering her mast to pass under Grau du Roi bridge, or arranging for the latter to be swung open.

Grau du Roi to Port de Bouc. Be careful to give the shore a good wide berth, as the land is yearly extending seawards. Thus keep well away from Espiguette Point, and when crossing the Gulf of Saintes Maries steer a course that will take you two miles South of Beauduc Point. Thence proceeding eastward, do not close the land nearer than a distance of $1\frac{1}{2}$ miles. The various creeks and minor mouths of the Rhône, although attractive on the chart, are too shallow to admit even a small yacht. When approaching the true mouth of the Rhône and the water becomes discoloured, it is better to edge out to a distance of 2 miles; for the shoaling here is more persistent and the wind soon creates a rough sea.

Faraman lighthouse is an excellent mark just east of the useless Vieux Rhône mouth, and it was here that the Ellerman

GENERAL VIEW OF ENTRANCE.



ETANG
DU
REPAUSSET.

OBSELETE
EIGHT HOUSE

LANDING STAGES

MAIN STREET
FOR
SHOPS AND
POST OFFICE.

BATHING BEACH.

LE GRAU DU ROI.

0 1 2 3 CABLES.

liner "City of Paris" got ashore in 1933. This is a low-lying, inhospitable coast, where many good ships have been wrecked; so that it had better be passed quickly. The west-going current out of the Rhône, meeting a westerly wind off these shoals, immediately produces the kind of waves which punish all except craft beyond 50 tons. The absence of any lightship, beacon, buoy, or any mark whatsoever to indicate the SE extremity of the River Rhône's deposited silt, should make the mariner determined to keep well to the southward. Thus, it is well to head away in the direction of Cape Couronne until Port de Bouc is seen bearing NE, when alter course for the latter.

Port de Bouc. It is true that on the western side of Foz Gulf there exists an anchorage in Anse du Repos north of the southern mole lighthouse. This is satisfactory when stopping for the night, provided the wind has no East in it; and of course a yacht could run up the artificial channel into **Port St. Louis**, where there is plenty of water if you keep off the banks. This, likewise, is the terminus of the inland route from Havre to the Mediterranean. But Port St. Louis is such a dreary, desolate, place that Port de Bouc on the opposite side of Foz Gulf is preferable.

There is no difficulty in entering Port de Bouc, which is open to the SW. The square Fort Vauban is a splendid mark when approaching. Leave this to starboard, and the mole lighthouse to port. (See sketches of these at inset of accompanying plan.) Now carry on straight ahead, turn to starboard as shewn by the arrow—though avoid the shoals at the eastward side—and make for the Bassin Aubran between two low-lying grass-limned artificial banks. This is quite the snuggest and handiest spot, clear of traffic, yet commanding an uninterrupted view. It would seem to have been constructed as a fitting-out basin for the adjoining shipyard, but is perfectly clean. A good berth will be chosen

on the north side at the quay by an obsolete barge ; or else with bow anchor and a line to quay from the stern. A few yards to the westward is a general store for buying petrol, paraffin, and most kinds of food, the town being five minutes further.

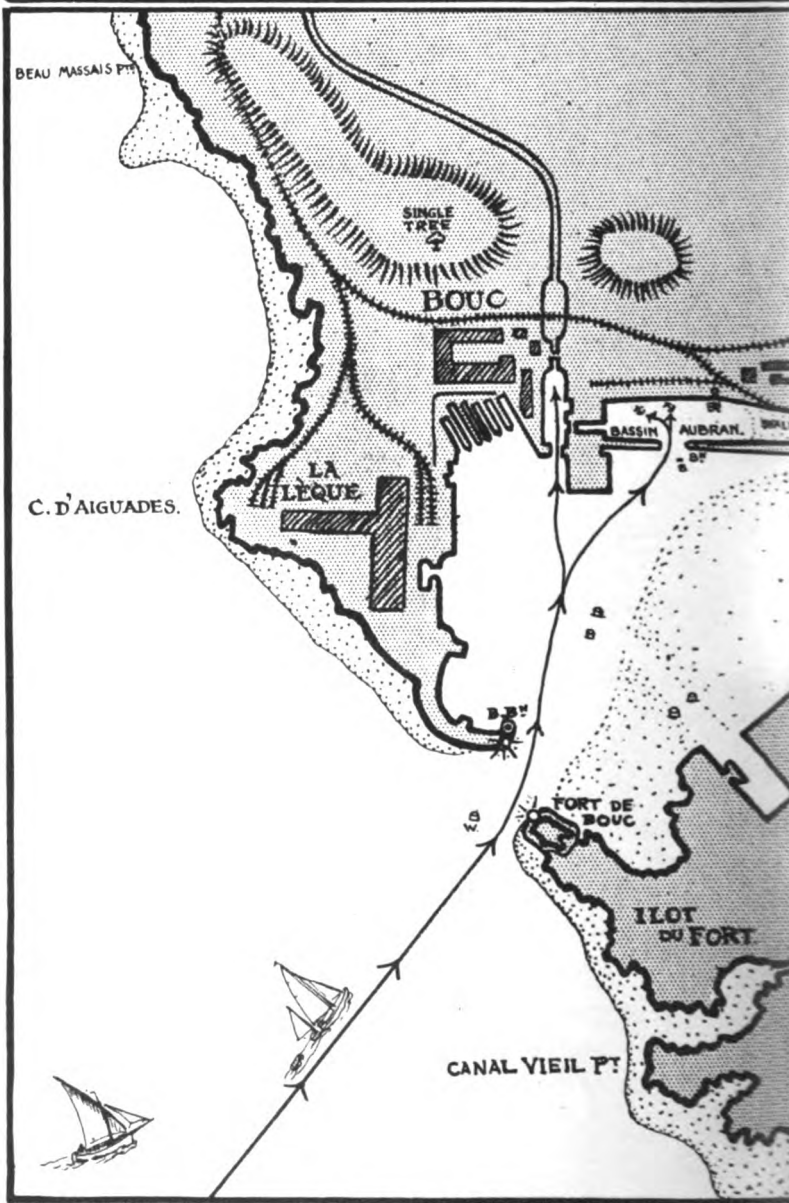
In this Bassin Aubran a depth of $2\frac{1}{2}$ fathoms will be found as to the western half, but avoid the eastern part which is quite shallow. It will be noticed that another arrow in the plan guides into a harbour which has direct access into the Arles canal. This harbour has quays and lies in the little, dull town's midst. There is no reason why a yacht should not moor here ordinarily. It is, however, less private and when the wind has any South this is altogether too lively. The Bassin Aubran is, therefore, generally preferable, although some yachts choose a berth more to the east down the ship canal which runs to Martigues.

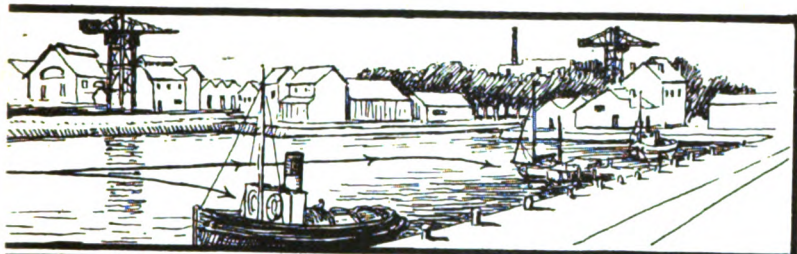
Port de Bouc to Marseille. If caught by the Mistral or fog, there are several convenient little bays where a small yacht could anchor after feeling her way in with care. Whilst **Anse des Laurons** and **Bonnieu Cove** would be suitable in easterly winds, **Port de Carro** with a jetty and a depth of 10 feet is a capital shelter against all winds except those from SE, and particularly suitable for riding out a Mistral. Southerly winds, however, are infrequent. Further East will be found several other tiny bays such as **Port de Ste. Croix**, and **Port de Carry**. Beware of tunny nets.

Fog is by no means rare during the summer, but the cliffs are steep-to, and the current is practically negligible. A compass course should bring you with little anxiety to Pharo Point at **Marseille**, before which the gilt statue of **Nôtre Dame de la Garde** (see sketch), outside a church on the Marseille hill-top, will have burst through the fog. The transbordeur bridge will also just be showing. During thick weather be cautious to keep well north of Ratoneau Island and be on the alert for the liners which are continually on



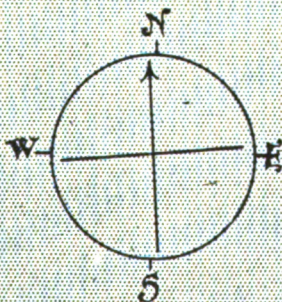
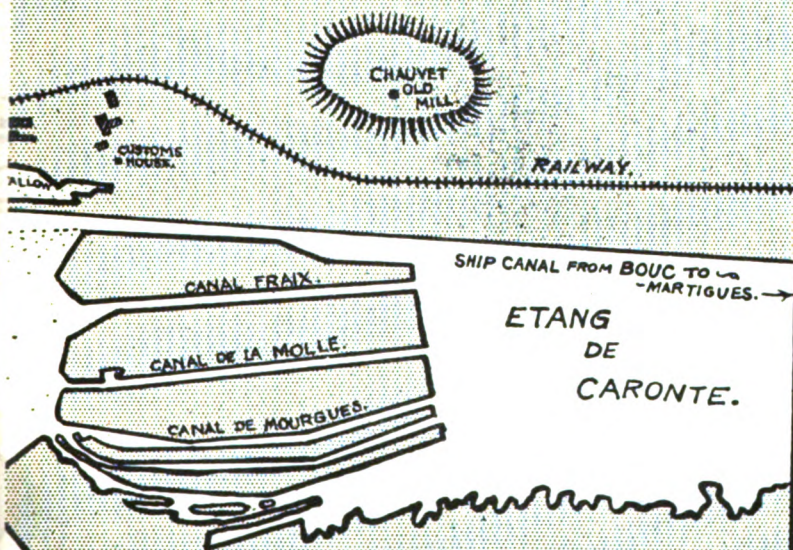
· VIEW LOOKING OUT TO SEA THROUGH ENTRANCE,
FROM INSIDE BASSIN AUBRAN.





PORT DE BOUC

ONE SEA MILE

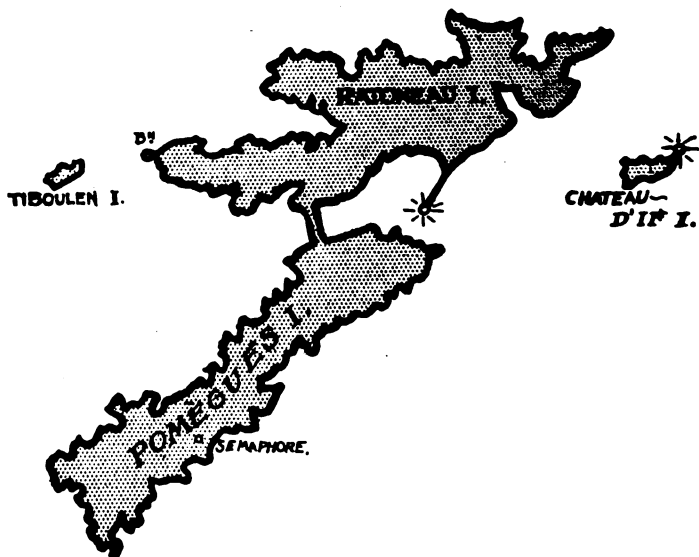
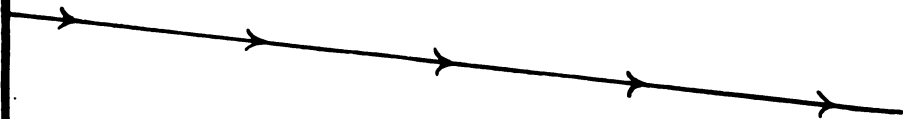
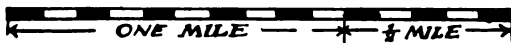


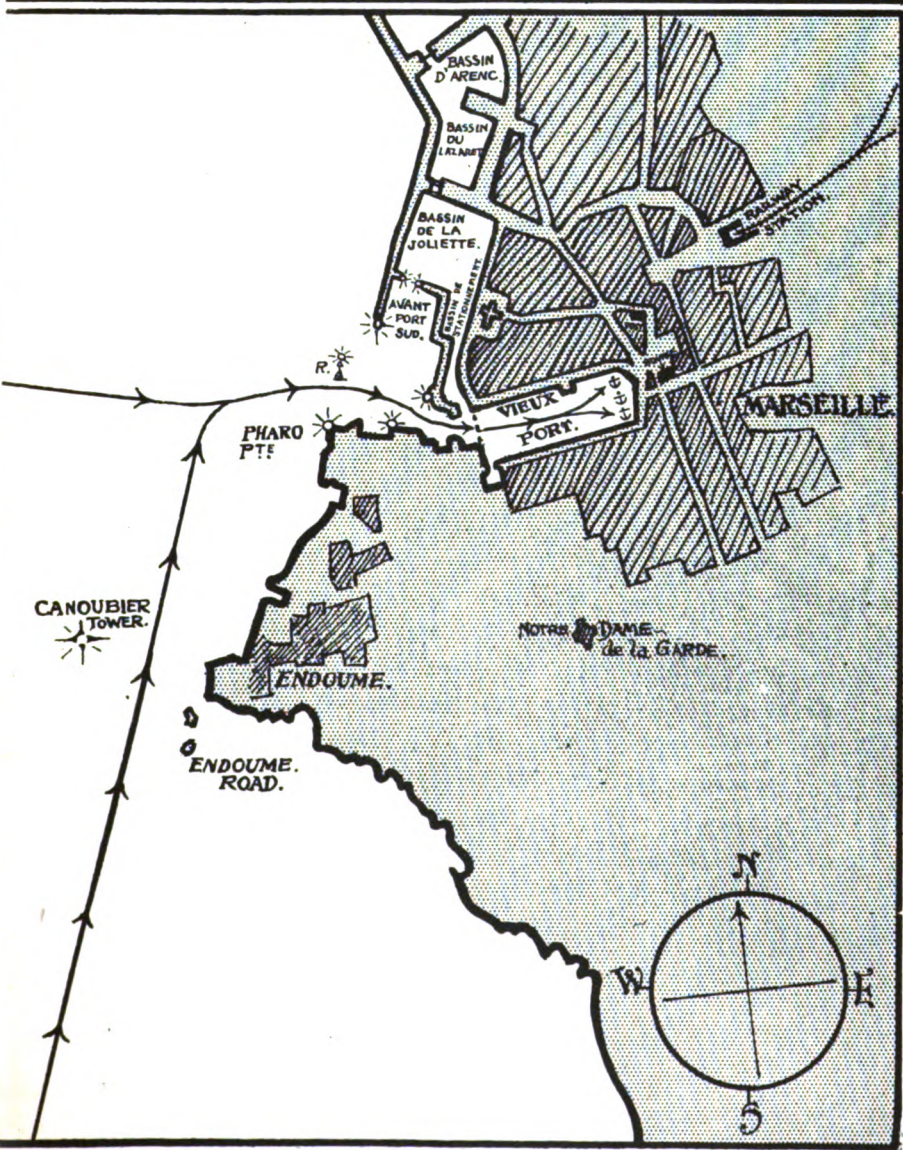
• ENTERING MARSEILLE •

NOTRE-DAME
DE LA GARDE



MARSEILLE.





the move. After making for Pharo Point, follow round to starboard and pass under the transbordeur bridge (similar to that at Nantes across the Loire), and go straight into the Vieux Port. At all times this is very crowded, but a berth can be found with a little effort.

In the case of a big yacht of 100 tons or more, it would be well to go half-way down the Vieux Port, seek a vacant spot on the south side, let go anchor in the middle, pay out plenty of cable and then run out stern lines to the south quay. Yachts of lesser tonnage should go to the extreme eastern end, let go anchor with plenty of cable in 3 fathoms and ride East-and-West, with stern on to the Quai des Belges. You are now within easy distance of the famous Rue Cannebière, the restaurants, shops, Post Office, Banks, British Consul, chart depot, and yacht-chandlers. Repairs to hull and engines, sailmakers, slipways, are all obtainable. One of the safest and most sheltered harbours in the world.

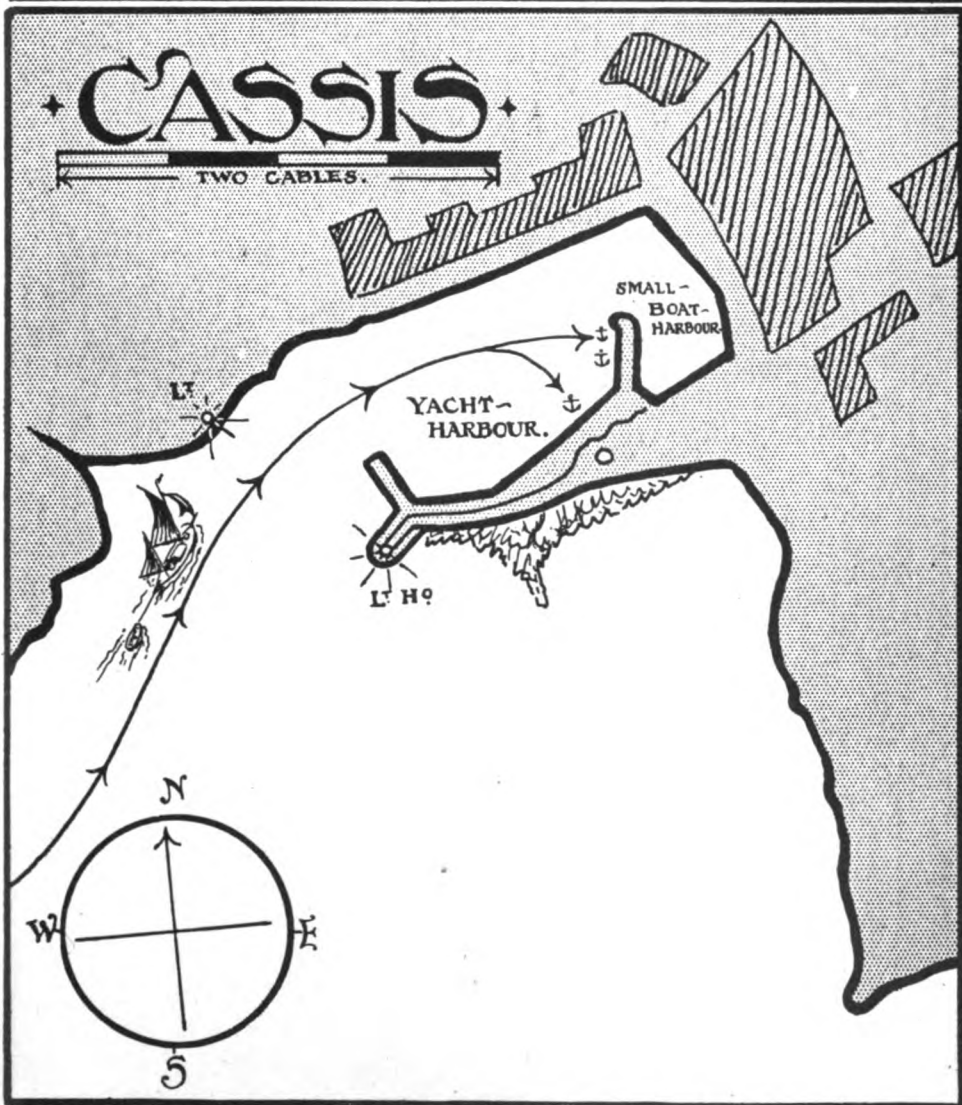
Port du Frioul. This expansive harbour has been formed by throwing a mole from Ratoneau Island to Pomègues, thereby shutting it off at the western side, and then running another mole at the eastern side partially across, affording a wide enough entrance. It is lonely, rather dull, and the holding ground has too much weed for perfection. On the other hand, for those who want good shelter without having to use the crowded and somewhat dirty Marseille Vieux Port, and prefer peace to noise, Port du Frioul can be well recommended. It was constructed originally for quarantine purposes, there is a depth of not less than 4 fathoms, the pilot cutter anchors here; and, provided you veer out a good deal more cable than usual, no anxiety need be feared. Turn to starboard after entering, go well up towards the north end in case the Mistral blows, let go anchor to the westward and run out stern lines to the eastern mole.

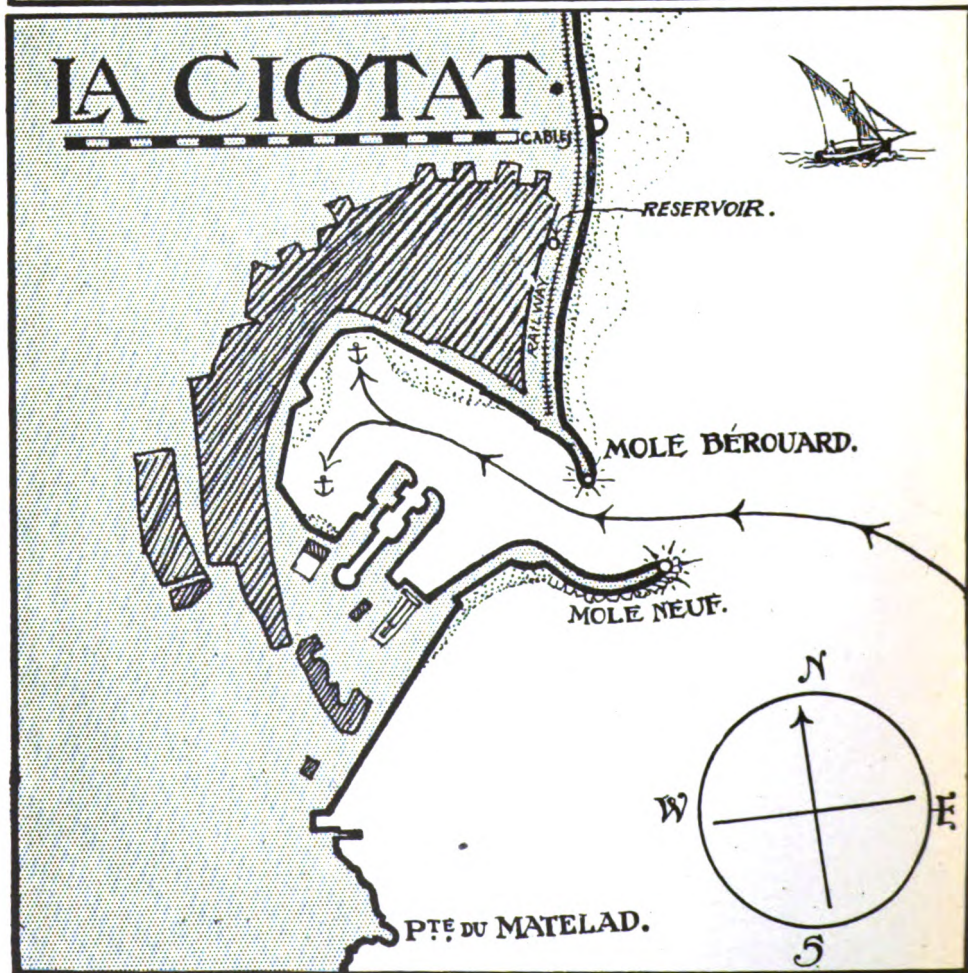
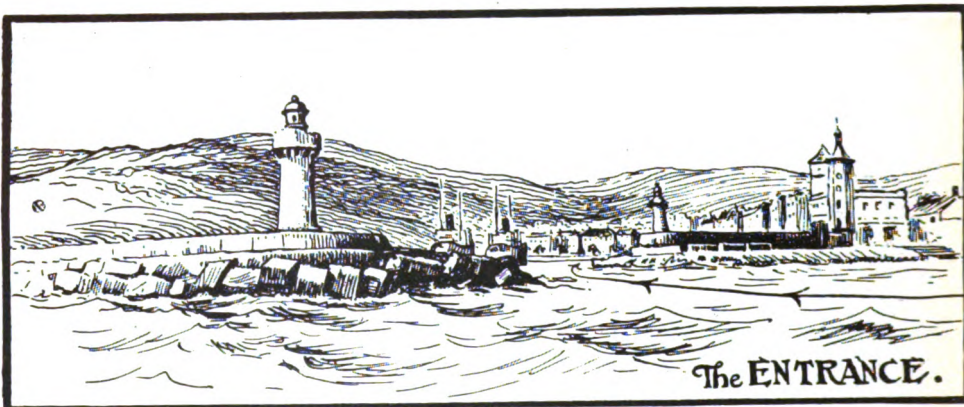
Stores can be obtained from Marseille by going across in the local motor craft.

N.B. The yachtsman will find that in more than one of these south coast harbours, where the holding ground is indifferent because of weed, it is advantageous to use one of those multiple-fluke anchors as kedge.

Marseille to Cassis. The coast presents no difficulty, but Cape Croisette is a wild place during hard westerlies. When once round the corner, inside Ile de Jarron, the high cliffs afford excellent protection from the Mistral. If suddenly overcome by this wind, there are plenty of coves and *calanques* (small fjords) where no northerly or north-wester could do harm. If caught, for example, on the north side of Cape Croisette, run into **Anse des Goudes**, which is a natural horseshoe-shaped little harbour. On the east side of Cape Croisette you would be safe in the **Calanque de Sormiou** during the Mistral ; in the **Calanque de Morgiou** in all weathers except SE gales. Go well up and anchor in 3 fathoms. It is almost, but not quite, landlocked. **Port Pin**, further East, is another good little creek when the wind is off the land. But **Port Miou** is the best of all, singularly beautiful, safe in all weathers and though narrow provides depth enough up to 2 fathoms. Feel your way so far inland as desirable, and from the top it is only a quarter of an hour's walk through the wood into Cassis.

Cassis. This is a yachtman's paradise, and perhaps the most beautiful little harbour in all France, though a stranger on his first visit may find the approach not easy. The round stone lighthouse on the NW shore has been dismantled, and an iron light-standard erected closer to the water. The number of villas yearly being erected has made the old pictorial representations unrecognizable, but the accompanying sketch shows the harbour entrance just opening. Coming





in from the sea, first pick up the round, pier-lighthouse. When nearly abreast of this bear away slightly to port when you will identify the previously mentioned light-standard, which will be left to port. Keep rather over on this port side at first (as shown in sketch) so as to clear an extension of 4 great stone blocks which run out northward of the mole. (This will be noticed in the plan.) It was in the year 1930 that the blocks were laid to keep Cassis more sheltered in heavy weather. Follow the arrow and bring up at the eastern end, letting go anchor to the west and running stern on towards the jetty at the eastern end ; alternatively bringing up with anchor to the NW and stern on to the mole as indicated, though a steamer sometimes arrives. But avoid the SW corner of this harbour.

There is a general depth of 2 fathoms up to the jetty's west side, yet the water quickly shoals on the east side which consists of a harbour for small boats. There is a fleet of local small motor fishing boats. All food supplies and engine oils obtainable.

La Ciotat. This harbour is rather less spacious than would appear in the plan ; for it is the base for the Messageries Maritimes liners which come here to refit. The entrance is clearly shown in the sketch. Leave these steamers to port and make for the NW end, where you will see one or two other yachts brought up. Let go in nearly 2 fathoms, with bows to the SE and stern on to the quay. There is an even quieter berth in the south-western corner, where yachts lie all the winter ; but beware of liners' heavy cables, and their anchor buoys, when proceeding round. A yacht could be left afloat here till the next spring in perfect safety, and sheltered from all winds. When the time comes for scrubbing and anti-fouling, small yachts wait till a liner is about to enter the dry dock. There is no slipway at La Ciotat, but a giant crane could haul a good-sized yacht ashore.

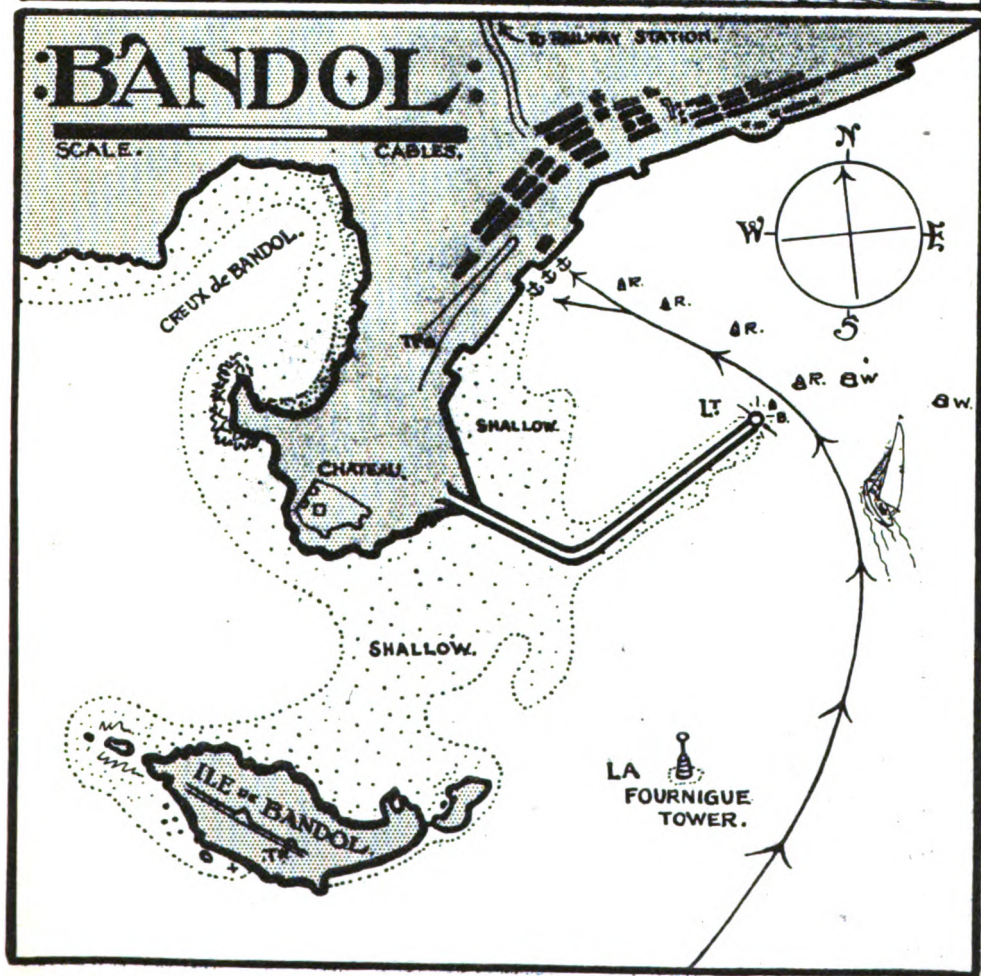
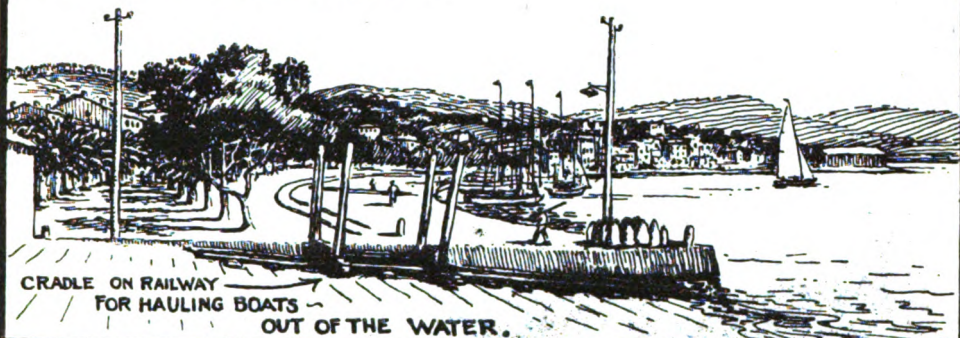
Bandol. This is another of those beautiful places where yachting is possible all the year round. When approaching from the west, keep well clear of Ile de Bandol which has the appearance of being part of the background. Pick up La Fournigue horizontal-striped tower beacon, and leave it to port. You will now see the SE mole of the harbour ahead. Round its extremity quite close, leaving the black buoy to port, and then giving the four red buoys a good clearance, as the water immediately shoals on the NE side. The yacht berths will be found at the NW end ; with stern on to quay in the customary manner and anchor towards the SE, but not more than about 9 feet depth must be expected thereabouts. The holding ground is not to be trusted, consisting of mud and weed. So long as the Mistral blows, no anxiety need be entertained, but an easterly wind has the habit of springing up quite suddenly in the night and blowing freshly, raising a short jump, causing yachts to drag—then dying away into a calm without warning. If you cannot obtain a mooring, ride to 40 fathoms of chain, and run out a good heavy grapnel anchor as kedge. If a real easterly gale seems likely, slide a heavy weight down the cable as further security, and shift over towards the south side of Bandol's harbour, where the mole affords more shelter : but beware of getting into the shallows.

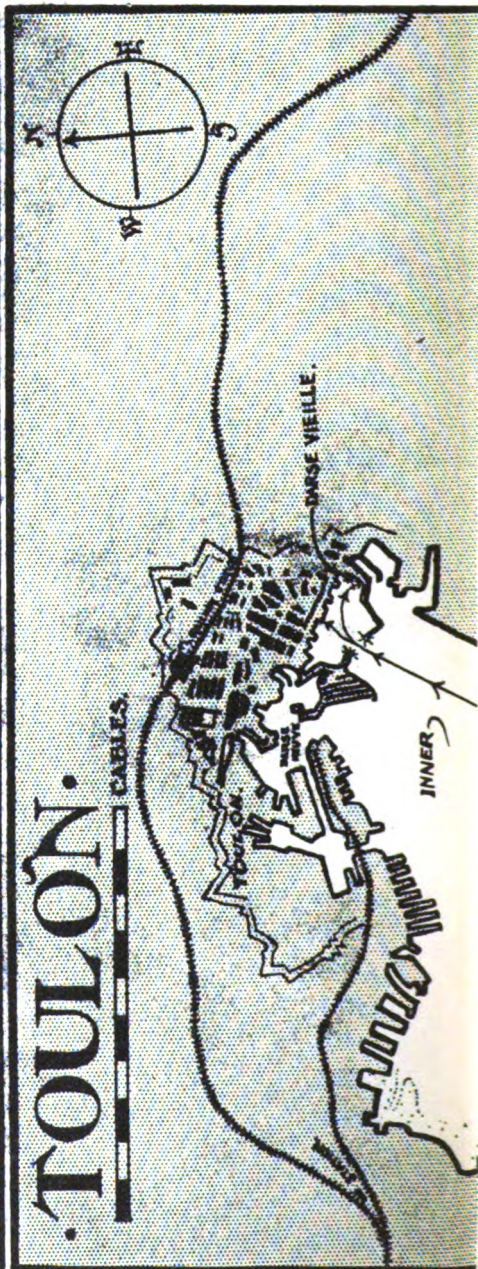
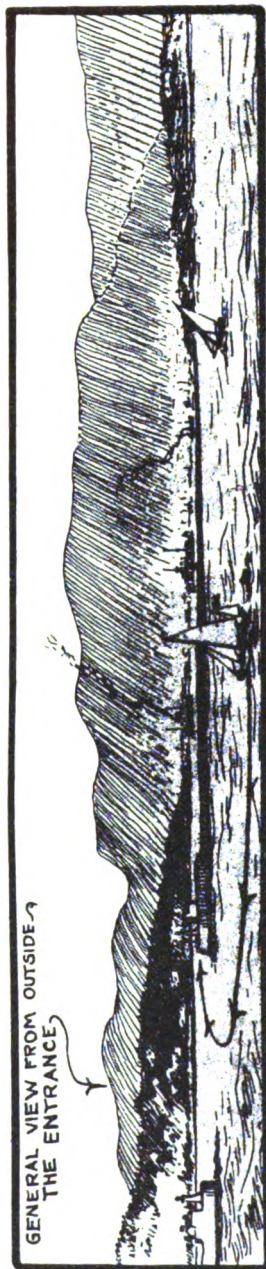
The yacht berths will be seen in the accompanying sketch, and the cradle which can be lowered down the patent slip is available for the use of yachts wishing to haul out for a scrub or repairs. Local assistance could be obtained. Fresh water laid on to the quay.

At Bandol all food supplies and motor requisites are at hand.

Sanary, just beyond Bandol Bay, is another artificial little harbour and quite delightful in most weathers, protected by a couple of moles, with a depth of 10 or 12 feet

• GENERAL VIEW OF THE FRONT.







at its SW end ; but not too comfortable when the wind is SE. All the usual supplies.

La Coudurière, just below Pointe Negre is an artificial harbour with perfect shelter, built and excavated for commercial purposes, but yachts are allowed in. Keep clear of other craft and let go in about 2 fathoms. This is a convenient spot if waiting for a slant to get round Cape Sicie, or during easterly weather.

Toulon. This is the French Devonport, and full of naval activity. There are several small harbours within the long breakwater, but the snuggest and handiest of all is the Darse Vieille for yachts of every tonnage.

The breakwater has two entrances : the Petite Passe at the North, and the Grande Passe at the South, end. The latter is wider and normally preferable. It is off here that a naval picket boat may board you for particulars as to where and whence bound. Follow the arrow northward across harbour into the Darse Vieille, and a big yacht should then anchor with bows to the southward, but stern on to the Quai Cronstadt, which runs East-and-West. In the accompanying sketch a yawl is about to enter by the Grande Passe.

Smaller yachts, that is to say up to about 50 tons, will find the best berth in Darse Vieille to be at the extreme eastern corner, letting go anchor with bows facing West and stern on to the quay. Plenty of cable should be veered, but this basin is safe from all winds, Mistral included, winter and summer. Moreover it is handy for shops, sailmakers, ship-chandlers, motor oils, and the centre of Toulon.

There are one or two small patent-slips in Toulon, but just across the harbour (half an hour by ferry steamer from Quai Cronstadt) at Balaguier are some more slips, together with a yacht yard, foundry, sheds, and laying-up facilities. Other yards will be discovered near La Seyne, at the western

end of Toulon. La Seyne is a small, artificial, very safe and easy, harbour with plenty of water ; but extremely dirty.

Easterly winds can and do blow very hard sometimes for days over Toulon harbour, raising the depth slightly. To the SW of Balaguier, in Tamaris Bay and a depth of about 2 fathoms, is a charming anchorage under the land except in easterly winds ; the Mistral at Toulon coming from about NW. The ferry steamers by means of a specially dredged narrow channel go right down to the southern end of this bay, so that it is possible to walk across the spit of sand and bathe at Sablettes Bay.

When leaving Toulon by the Petite Passe, beware of the torpedo range marked by barrel buoys. The naval authorities frequently run torpedoes here. If for any reason a small yacht was prevented from entering Toulon, there is the tiny harbour of Mourillon with about 9 feet depth just inside, and not much room. Shelter could be obtained during a Mistral, Mourillon lying just outside and to the NE of Toulon breakwater.

North-west winds along this coast are the more prevalent.

CHAPTER XV

(FOREIGN SECTION PART V)

MEDITERRANEAN: THE RIVIERA HARBOURS TO THE GULF OF GENOA, WITH NOTES ON THE ITALIAN PORTS FROM GENOA TO NAPLES

St. Mandrier. If privacy and peacefulness are desired, or if intending to remain only a night or two, many yachtsmen will prefer St. Mandrier to the thronged Darse Vieille of Toulon. In certain winds the latter becomes unpleasant when oil-fuel from French warships floats over the surface, whereas good shelter in clean water, with such slight traffic as motor-boats and trading tartanes, can be assured normally by not going further within Toulon than the Grande Passe. Having reached the southern end of that port's long break-water, steer South into St. Mandrier's small gulf. Leave to starboard a stone jetty on which is a naval watch-house, and keep in the bight's centre till you notice a quay on the eastern side where four or five tartanes will usually be found moored. It is better to secure alongside one of them, with head up to the North and bow anchor to the North-West as precaution against a possible Mistral; but during the summer only an exceptionally bad NW wind would here cause inconvenience. You can rely on finding 2 to 3 fathoms at this berth, but do not go further South into the bay as the water soon shallows. Ordinary provisions can be obtained from shops at the quay-side, and at least one good restaurant exists. There is a good service of autobuses and motor craft, enabling one easily to reach Toulon. St. Mandrier is largely peopled by pilots, fishermen, retired mariners, and employees of the French Navy. The naval hospital and seaplane base will

have been noted when approaching from the eastward. Strictly speaking, yachts are forbidden, and in any case a motor picket-boat will come off from the naval watch-house already mentioned. If the yachtsman will then call on the officer-in-charge and ask the courtesy of being allowed to remain for a brief visit this privilege will rarely be denied. The neighbouring scenery and walks are delightful.

Giens Peninsula. In fresh winds expect to find a bit of joggle off Escampobarious Point, and to the South of Grand Ribaud island especially during westerly winds. Although there is no tide, a West-going stream coming out of Hyères Roads soon kicks up a kind of race, whose white feather-like disturbance can be seen stretching most of the way across to Porquerolles island. During calm weather with light winds there is little to worry about, and at the worst this narrow disturbance lasts no longer than St. Alban's Race (Dorset), nor is it more ferocious. If caught in a Mistral hereabouts, there are two fairly good little anchorages for yachts not exceeding 5 feet draught. The first is inside Grand Langoustier Bay (Anse de Parfait), just to the eastward of Grand Langoustier Point, which is at the western extremity of Porquerolles island. Here the beach landing is good, and supplies could be obtained by walking up to an hotel which is open during the summer. The other shelter is on the SE side of Giens Peninsula at Pointe de la Tour Fondue. Here will be seen a stone jetty, whence the motor passenger boats run to Porquerolles. Do not foul their berth on the eastern side, but bring up on the western side. Feel your way in very cautiously, avoid the rocky ground, and get a rope on to the jetty. This spot can be recommended only during calm, settled weather or with off-shore winds.

Porquerolles. This charming little spot has in recent years become very popular among yachtsmen. Situated at

the head of a wide bay on the island's northern shore, it is still simple and unspoiled, with every facility for bathing and delightful walks. Having given the shores a wide berth, steer due South, when you will see the village and an old fort (almost hidden among the trees). Presently a long stone jetty will appear on the eastern side. If stopping only a night or two in fine, settled weather anchor in the middle. Should a Mistral threaten, choose a berth about half-way down the jetty. The best selection is as follows. Look out for a white mooring buoy, let go anchor outside of this, run stern lines on to the jetty, haul in, and then have an additional warp from the bows to the buoy. With the ship's head lying to the NW you will ride out any Mistral with nothing more than a bit of joggle, and you will be safe from all other winds. Although the buoy is private property, French regulations permit other craft to make use of it. Ashore, within a few yards, will be found a butcher, baker, grocer, with a general store and several restaurants. Excellent drinking water from the village pump in the square facing the church.

Port Cros. Although there exists at the far northern end of Hyères' wide bay a small haven named **Pothuau**, this is somewhat off the cruiser's track, quite small, and generally crowded with naval as well as other craft. The next suitable anchorage is therefore on the western side of Port Cros island, in a wide cove also called Port Cros. Coming from the westward, go round the north of Bagau island, then steer SSE½E, leave an old fort on your port hand, when stand in so near to the eastern shore as your draught permits. Big steam yachts run a line from the bows to a heavy naval buoy, and stern warps to a ring-bolt in the rocks on the southern side. The tiny boat harbour is shallow, but in fine weather many French yachts let go anchor off the pier and haul stern in to the pier. Port Cros is one of the most beautiful, primitive, and fascinating islands in all Europe, but this natural harbour

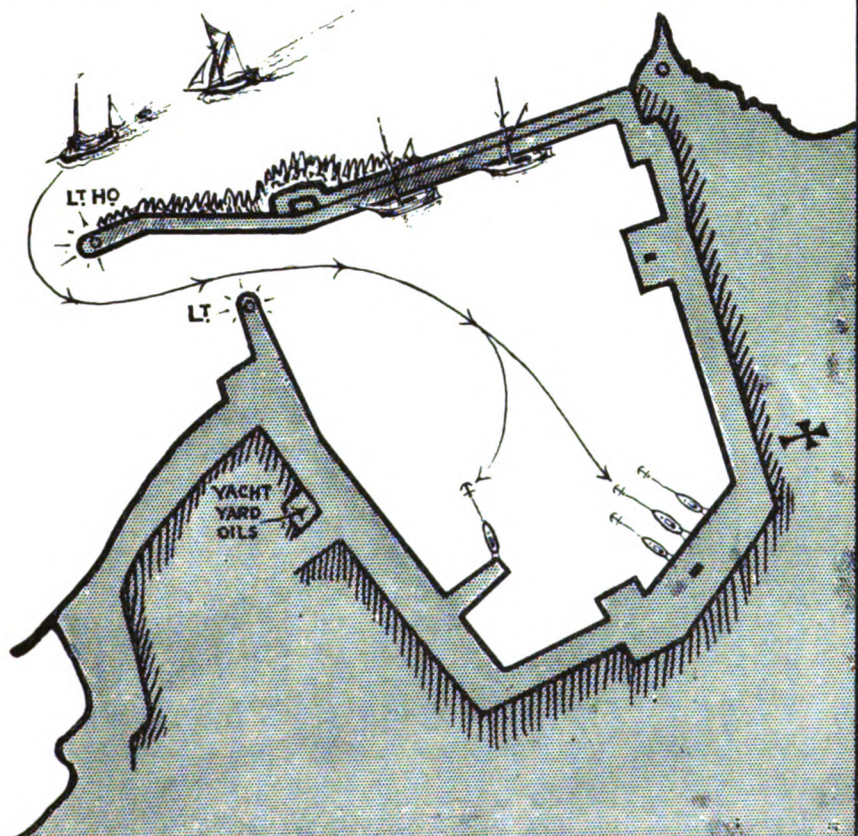
can be very unpleasant when a fresh wind blows from West or South-West. The holding ground, however, of mud and weed is good. With one anchor to the SW and the other well up to the NW, and plenty of chain, it is just possible to avoid the Mistral's worst efforts. Reliable ground tackle is essential. With easterly winds the swell disappears and you are very snug, but at the first hint of any weather from SW to NW clear out and make for a better port, otherwise you may be uncomfortable during three, six, or even nine days' blow. Practically all the supplies come from the mainland in occasional motor-boats, but yachtsmen can purchase meat out of cold storage from the hotel close to the beach. At the shop it is frequently possible to obtain eggs, fruit, bread, tinned goods, and paraffin. The waters abound in fish.

Le Lavandou. A heavy sea will sometimes be encountered between the lonely, barely inhabited Port Cros and Cape Bénat on the mainland. Local vessels, such as the trading tartanes (which now use motors), have a favourite anchorage during easterly blows when coming down past the eastern end of Hyères Bay: they shelter off Bregançon island. But during Mistrals, or westerlies, they bring up off Lavandou in the bay. Submarines, destroyers, and cruisers likewise. But any yacht drawing not more than 6 feet can find a berth in the small harbour of Lavandou, provided entrance is made with great caution. It affords perfect security and is quite comfortable during Mistrals, though a certain amount of run sets in from easterlies. The holding ground is excellent, being clean hard sand, and you can see your anchor on the bottom. In 1934 the breakwater was extended further westward, but, since there is no tide and the sand cannot be sluiced out, the harbour tends to silt up in the centre. Only for a distance of about 40 feet from the quay—and that at its western half—can a yacht be sure of finding enough water for floating. When approaching, be careful to go close by the breakwater's

ST TROPEZ



APPROACHING FROM ENE



extremity and then immediately follow it round, or you will hit the central sand. Let go anchor and haul stern into quay. If the motor passenger vessel (which leaves for the Ile du Levant about 3 p.m.) is lying just off the breakwater-head you will have to creep past alongside her. Should you arrive by night remember that the light is fixed some yards inside of the breakwater's seaward end : you had better anchor in line and West from it, off the beach, till daylight. Subject to the above, a vessel not exceeding more than 35 feet over all will find Lavandou a lovely place. There is a fleet of well-kept motor fishing boats. Excellent shops, restaurants, a first-class garage with mechanics, supplies of paraffin and petrol are all available close to the port.

Cavalaire (not to be confused with Cavalière). This is a beautiful bay amid charming surroundings of mountains and forests, with a nice sandy beach. The drawback consists in its being exposed, but particularly from the East. Westerly winds also disturb the place. There is a small pier, but with very little water even at the northern end. During winter months the seas occasionally sweep right over, and in any case the bottom is rocky off this mole. Nevertheless, in ordinary summer weather yachts bring up for days at a time and ride out Mistral in safety, a good berth in 2 fathoms (sand) being about 300 yards NW of the pier's northern end, with one anchor to the NW and another to the SE. There is a restaurant on the beach and the shops are quite near.

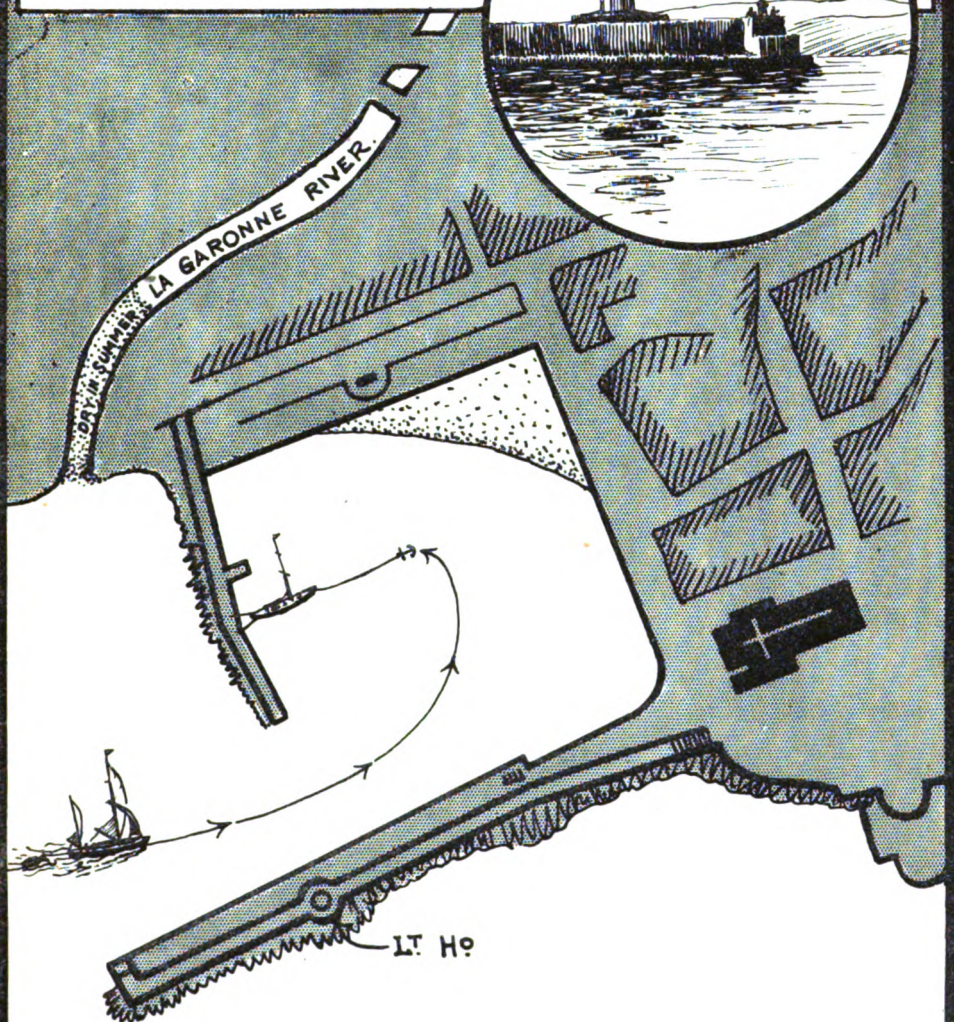
St. Tropez. When bound round that stretch of coast extending from Cape Lardier to Cape Camarat and Cape St. Tropez fine weather should be chosen, for the seas here can be merciless to all except biggish vessels. Fishermen and tartane skippers have cause to respect this peninsula with awe during easterly winds. In any Mistral a yacht cannot hug the cliffs closely enough because of the outlying rocks,

but good shelter can be found in a cove between Capes Taillat and Lardier till that north-wester dies down at sunset, when the voyage could be hurried into St. Tropez. Give the above headlands a wide berth till you pick up the Basse de la Moutte black beacon tower, leaving it to port. Then make for the other black beacon tower, Basse Rabiou, after which it is a clear run up the Gulf of St. Tropez, keeping a reasonable distance from the southern shore. Presently you will see a low-lying town looking singularly Oriental, surmounted by a church belfry, and then a tall lighthouse. This is that old fishing port, St. Tropez, which in recent years has become a favourite yachting station, as formerly it was famous for its fisheries. Small coasting steamers call here every week, steam and motor yachts of several hundred tons moor with stern to quay, and the harbour from mid-July to mid-September is usually crowded. Except on the western and extreme north-eastern side there is a depth about 15 feet. Although perfectly safe in all weathers, this harbour is somewhat exposed to Mistral, seeing that its entrance remains open to North of West. The custom of veering an unusual amount of cable, and even of letting go a second anchor, is thus natural. This practice in turn frequently causes anchors to be fouled, wherefore it is advisable to buoy them. On the other hand, there is so much motor traffic that propellers may cut the buoy off.

The favourite berths lie in the SE corner, though it is here that any Mistral is most felt. The cafés and shops are all close to the quay. For small craft up to about 25 tons the safest berth is on the western side of the harbour immediately north of a short jetty, but beware of going too far to the West as the water shoals. Let go anchor north of this jetty's eastern end in about 2 fathoms and haul stern on to that extremity. You are now out of the traffic and quite snug. Contrary to what might be expected, the NW corner of the harbour is very uncomfortable in a Mistral owing to the backwash.

ST RAPHAËL

LIGHT HOUSE
ON PIER FROM
INSIDE HARBOUR.



Here, too, will be found an excellent yacht-building firm (Ch. Silvy & Cie), where craft can be hauled into hangars ashore for the winter. Excellent motor mechanics are available in the town, and yachts who fill up with petrol (*essence*) *sous douane* are able to do so from the quay at lower cost.

There is no difficulty in entering St. Tropez, but a sharp look-out should be kept for outcoming craft, since the approach narrows before widening. Leave the tall lighthouse to port and the new light standard to starboard. If under canvas, remember there is not too much room for manœuvring before bringing up.

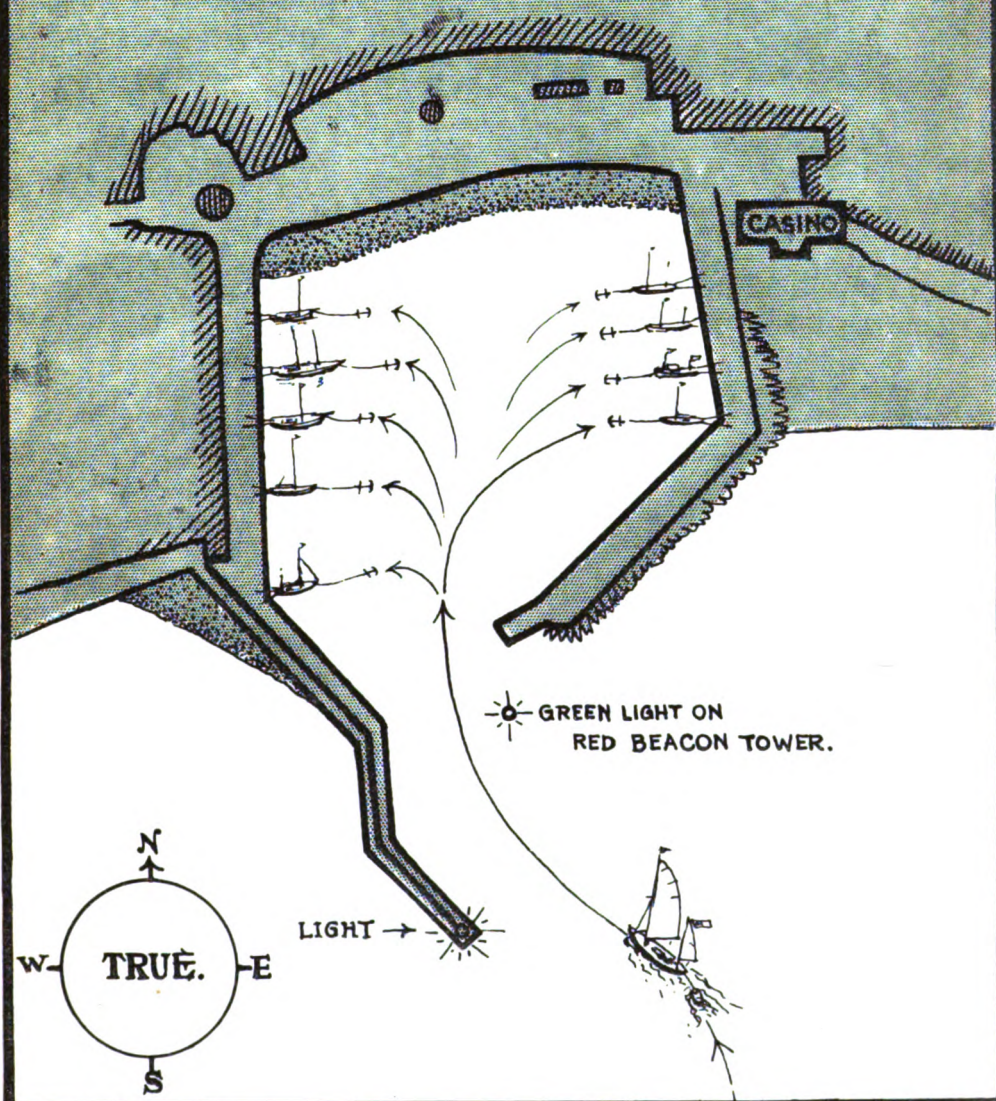
Sainte Maxime. This very modern little port, lying on the northern side of St. Tropez Gulf, is quite pleasant for a temporary sojourn. Let go anchor and haul astern to the mole. The approach presents no difficulties. The harbour cannot be unconditionally recommended as it is uncomfortable during Mistrals, whilst both southerly and easterly gales send in a big swell. Between here and St. Raphael is a series of delightful bays, through which it is a rare enjoyment to sail.

Saint Raphael is about as safe and snug a harbour for small vessels as could be desired, though it is becoming somewhat encumbered owing to the naval craft kept ready for attendance on the seaplanes from Fréjus. Beware of a seaplane which may be lying at a mooring inside and taking up a good deal of room. Saint Raphael is just an artificial port made by two moles extended from the land, with quays round three sides of the square and a sandy beach on the fourth, where local fishing boats are hauled up. On that beach is also a convenient slip with cradle, big enough for perhaps a 20-ton yacht. At first the harbour entrance is not easily discerned, and it is also very narrow, its width being sometimes further curtailed by a trading steamer alongside the eastern breakwater.

Steer to pick up the lighthouse which is nearly at the seaward end of that pier. Having eased down to dead slow, and leaving this light to starboard, go straight in. The best berth is to port, after passing the moored naval vedette boats. Let go anchor in about the middle of the harbour and warp in with stern to south quay. Keep off the northern quay, which is rocky and quickly shoals. Avoid the eastern quay, because it is not too comfortable should the wind come in, whereas from the southern quay even a winter's Mistral will bring no harm to a yacht, other than some very fine sand which may be deposited in large quantities. A very convenient port if desirous of spending some weeks in seclusion, yet with excellent shops and cheap restaurants only a few minutes distant. Both a sailmaker and marine mechanic available. Beware of rats at the quay.

Agay Roads. During ordinary summer weather this partially sheltered bay, set in beautiful surroundings, is very handy for a night's anchorage as it lies on the direct route between Toulon and Cannes or Nice. A good berth will be selected on the North-East side, near a farm, and the only wind likely to cause discomfort would be from the SSE. It is customary to see one or two yachts off here most nights in the summer. At the northern end are some substantial posts driven into the beach to which tartanes secure their bows and ride securely when the Mistral blows. Recently a small boat harbour, with breakwater, has been made in the North-West corner. A yacht of (say) 8 tons could find shelter from every kind of wind if she entered cautiously, laid her anchor to the North, and hauled her stern to the North side of the breakwater, which runs roughly eastwards. Here land for the village shops and several quite good hotels. The railway and motor-buses to Cannes pass near the beach. Some enjoyable trips can be made in the dinghy exploring the bay.

CANNES



Cannes. When once to the East of Agay Roads the Mistral blows with less frequency and for shorter periods. Off Théoule, which has a small harbour, there is a good anchorage against westerly winds, and Cannes lies only 4 miles away. This Gulf of Napoule for very many days in the year is ruffled by only gentle breezes, which die down by sunset : consequently it is generally safe to anchor off shore. This point is stressed, since it is not very convenient to use Cannes merely for a night on passage. The harbour in summer is crowded both on the East and the West sides, with hull touching hull. To get under way is not rarely a lengthy business retrieving fouled anchors. I have seen the bigger yachts compelled to waste a whole hour thus patiently employed. It is better not to enter until a berth has been allotted by the Harbour Master, but if for any reason this should be impracticable, or you should have to run in for compulsory shelter, select a berth on the port hand short of the tiered craft. Let go anchor with plenty of cable and haul stern to quay. The entrance presents no difficulty. Leave the red beacon tower to starboard and proceed between the two jetties. It is customary for the big yachts to use the eastern (Albert Edouard) side, where also you can arrange for the telephone and electric light to be brought aboard. Both the larger craft on this Casino jetty and the smaller ones on the western side spend most of their time in port. The extreme northern part of Cannes harbour is shoal, with rocks, but on that sandy beach are slips and cradles enabling yachts to be hauled ashore for repairs. Just to seaward of this beach many small craft have moorings, but landing would have to be made by dinghy. All supplies such as ropes, engine-room requisites, and sails can be obtained from the various chandlers on the western quay. At La Bocca (1 mile west) is a yacht-builder with slipway and laying-up hangar. A new yacht yard with slipways has recently been started on the northern side of Ile Ste. Marguerite.

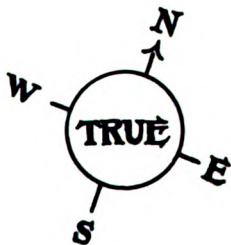
Ile St. Honorat, immediately to the South of **Ste. Marguerite**, affords during ordinary weather one of the most charming anchorages along the Riviera. If entering from the eastward, be sure that your draught is not too great and keep about 200 yards off the **Ste. Marguerite** beach before turning South to bring up off a small open-air restaurant on the North side of **Honorat** about one-third of that island's length reckoned from the westward. There is no difficulty otherwise. Far better than the crowded **Cannes** harbour, this berth is so clean that you can see your cable on the bottom lying in silver sand. Let go in 3 to 4 fathoms. The holding ground is excellent and the scenery most restful. Convenient landing from the dinghy. A little further eastward, and about at the centre of **Honorat's** northern shore, is a tiny harbour with quays. By using caution any power yacht drawing 6 feet can enter and find shelter. During the day-time it may be full up with local passenger motor craft, but during the night it is usually deserted. No supplies, other than from the above-mentioned restaurant, but a delightful walk round the island under the pines and past the monastery. A yacht with $4\frac{1}{2}$ feet draught by the exercise of care can work this northern shore eastwards. During a southerly blow this enables the rough water off **Les Moines** rocks to be avoided, and you can run round with a fair wind into **Golfe Juan**.

Golfe Juan harbour, though completely ignored by some charts, is nearly so big as **Cannes** harbour, far less crowded, just as substantial, and generally preferable for all yachts whose draught does not exceed 8 feet. Under all circumstances, except a prolonged spell of hard easterly winds (when the motion is unpleasant), it affords perfect protection and comfort. During **Mistrals** it is ideal, and, having frequently used it, I choose this port every time rather than **Cannes** or **Antibes** or **Nice**. There are all the facilities of slipway and cradle, yacht chandlers, garage, motor mechanics; with a

GOLFÈ JUAN



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crane at the quayside for hoisting ashore anything of the size and weight of speed-craft. The water is clean, the surroundings are pleasant, shops and restaurants quite close, whilst both fresh water and petrol are laid on at the quayside. Having rounded the Lerin Isles past some entrancing scenery, steer on a northerly course to leave La Fourmigue red beacon tower to starboard. Carry on, and though at first the harbour will not be manifest, you will notice a tall conspicuous thin block of flats (at present painted brown). This building lies immediately East of the harbour entrance. Steer for the building and the light standard on the harbour's southern breakwater's extremity will soon show up. If drawing more than 6 feet, feel your way carefully till well inside, entering between the two breakwaters. The water now deepens to more than 9 feet. Proceed towards the NW corner, where you will find a cluster of moored yachts. Having chosen a berth, let go not less than 25 fathoms of chain and haul stern to quay. The south-western corner should be avoided. If no berth is available anchor in the middle of the harbour. (See French chart 5341 of the Service Hydrographique de la Marine.)

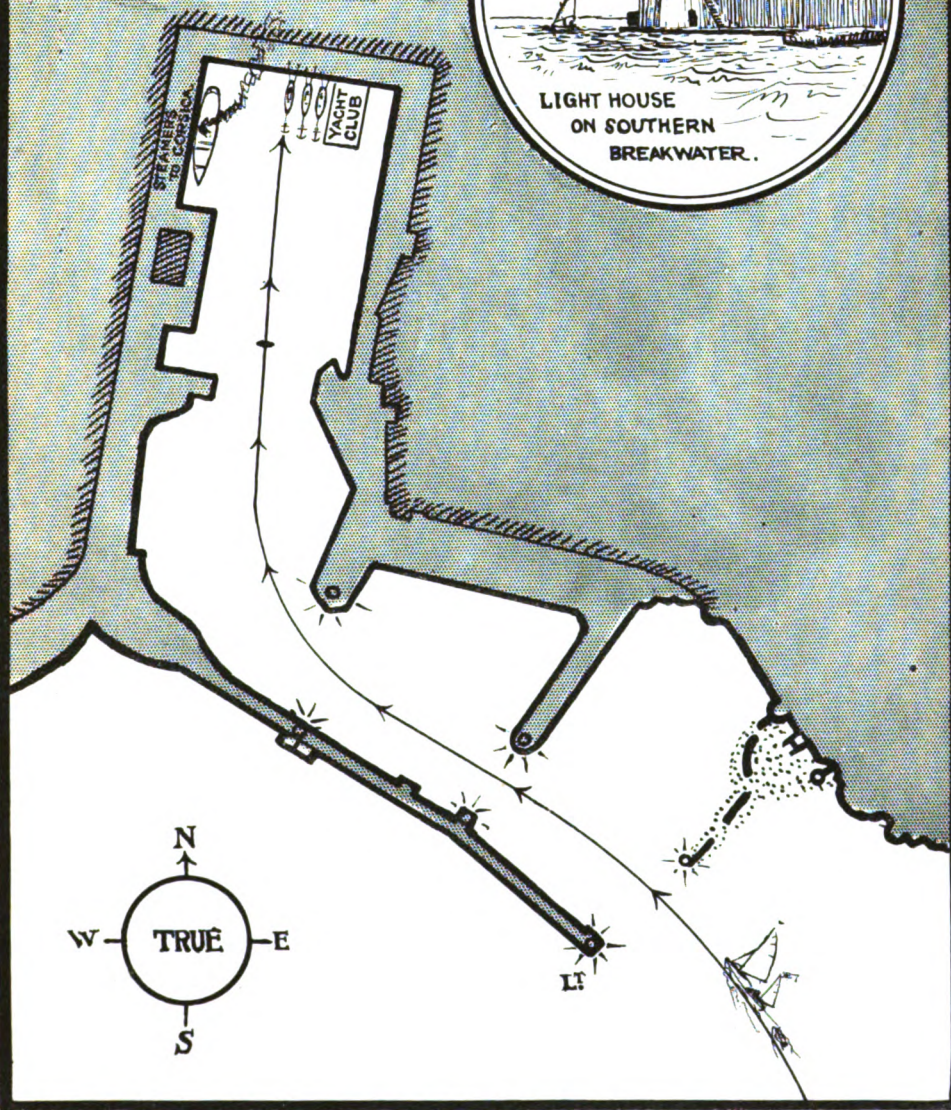
Antibes. Be careful to pass well to the eastward of a long, black, spar buoy which marks a rock. Then alter course West and proceed, leaving this buoy to the South. Be sure to choose a berth under the high breakwater, and not by the wooden jetty on the opposite side, for it becomes unpleasant near the latter when any wind pipes up. Before letting go anchor, buoy the same owing to sunken moorings. Often this harbour is very crowded with hull touching hull, stout fenders being very necessary, especially during easterly winds which send in a good deal of swell. Freshwater is laid on to the quay, and the usual supplies both as to provisions and oil are obtainable. There is likewise a yacht yard with slip. Excellent shops in the town. Antibes, however, is neither so secure

as Nice nor so pleasant as Golfe Juan, but quite big craft will find plenty of water up to $2\frac{1}{2}$ fathoms and many yachts lie afloat in Antibes all winter.

Nice, perfectly easy of access, and one of the snuggest harbours in France, is not very popular among yachtsmen, although the Promenade des Anglais looking out on to the sunlit Bay of Angels will always attract landmen. The port of Nice is at the eastern, and older as well as less beautiful, end of the town, with cranes and long quays. A considerable trade is carried on by cargo steamers arriving from various parts of the world, and there are the usual extensive warehouses of a busy port. Besides these vessels, keep a look-out for the fast passenger steamer which arrives from Corsica usually about 5 a.m. Her berth is on the West side of the harbour just short of the North end, and she lets go anchor before swinging round alongside the western quay. During this manœuvre her stern may sometimes seem to approach moderately near to the moored yachts.

During a hard southerly blow there is a certain amount of swell, even at the innermost end, though of no great consequence. Enter past the outer port, keep in the centre down the inner port, and, having carried on past the moored steamers, you will come to the North quay. Let go about 30 fathoms of cable to the South in good holding mud, and haul stern on to this North quay where yachts lie side by side. Towards the eastern end of the latter will be noticed a conspicuous floating clubhouse of the Nice Yacht Club. The desirable berth is as close to her starboard quarter as possible, and you are well clear of the steamers swinging. For a yacht staying some time a still better berth is alongside the clubhouse's port quarter, permission having been duly obtained. Yacht chandlers are on the south-west quay. There are also substantial slips for repairs and painting. Some yachts winter inside this harbour. If letters should be addressed

NICE



c/o Poste Restante, be careful to add "Place Wilson" or confusion is possible, owing to there being three post offices, viz. : (1) the above, in the centre of the town ; (2) a new one near the railway station ; (3) an older one near the harbour. The tram terminus adjoining the yacht station will be found convenient. Small shops close to the harbour. The better stores and restaurants in the newer and western part of the town. Garages close to the harbour for motor supplies.

Villefranche in recent years has become a popular roadstead for even the largest liners to make a temporary call, landing and embarking passengers. During winter months it is not often that this becomes impracticable, but a southerly gale creates the worst conditions. Normally this bay is quite safe and comfortable for small craft, for it happens to be one of the few spots where sailing matches are carried on weekly throughout the year. If staying only a night or two, let go anchor as convenient towards the head of the bay and land near the Welcome Hotel. On the West side is a dry dock at the inner harbour, where yachts of all sizes refit and can be repaired. There exists a crane for hauling out smaller yachts up to at least 6 tons. Whilst the harbour may be found somewhat crowded with the latter, a good anchorage can be chosen immediately outside, running a rope from stern to quay. Inquire at the Harbour Master's office. This corner, whilst convenient for wintering, is somewhat sunless. The bay itself is delightful during the summer. Supplies can easily be obtained from Nice, with which trains and buses connect.

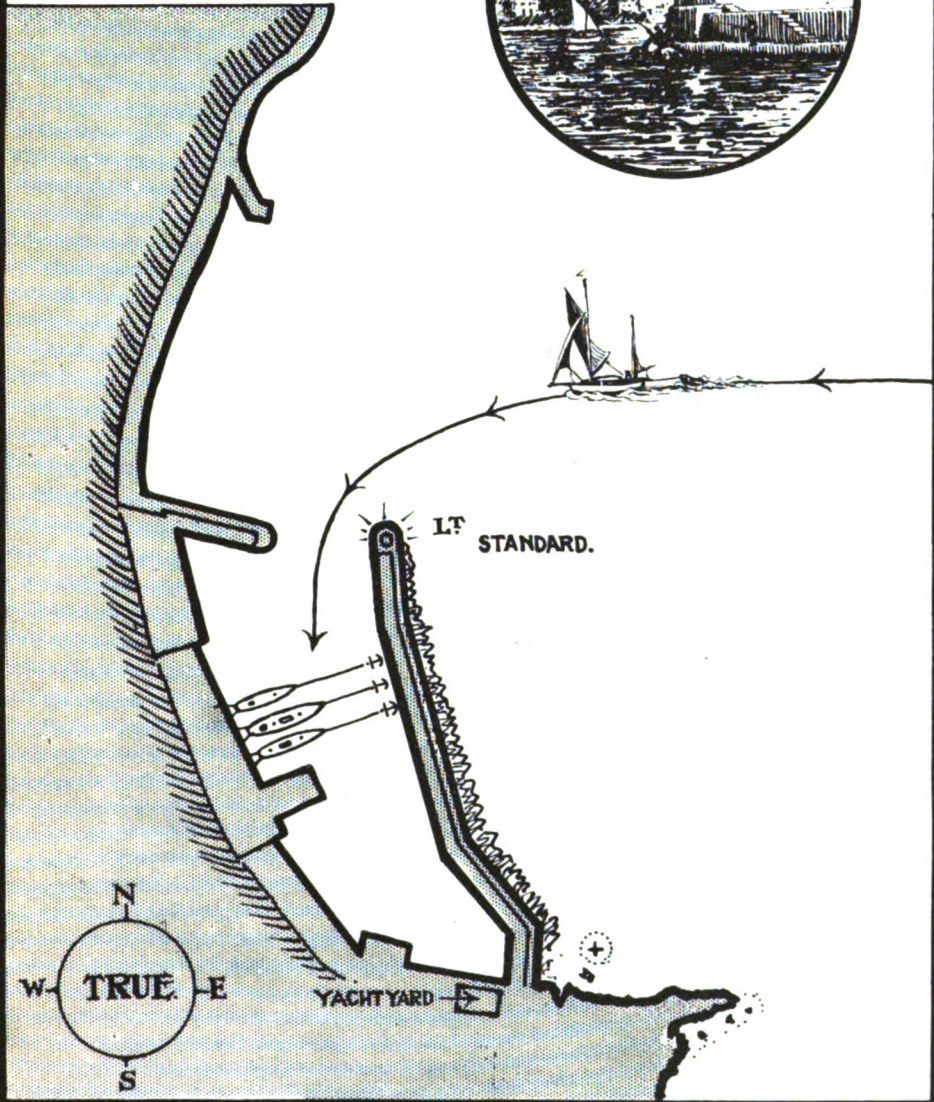
St. Jean-Cape Ferrat in the SW corner of Saint Hospice Bay is a very clean, but quite small, artificial harbour with excellent shelter, though in easterly gales a certain amount of run will be experienced, necessitating good strong stern warps. During normal weather this is one of the pleasantest havens along the coast for yachts of 8 or 9 feet draught, and

not much over ten times that length. But usually it is very crowded and a vacant berth may be impossible. Beware of getting a foul anchor on the moorings. To enter, approach under slow speed between the two short breakwaters, turn sharp to port, beware of standing too far over into the centre, let go buoyed anchor and haul astern to the quay, where convenient ring-bolts are let into the masonry. If possible, borrow temporarily local moorings. The main street, with the village shops, is quite close. There are several restaurants. Oil supplies available.

It would be advisable for a stranger, making a first visit, to inspect this harbour from the dinghy before deciding further. Motor-bus to Beaulieu, Nice, Villefranche.

Beaulieu. When approaching from the South, the entrance of this tiny port is difficult to observe as the two moles melt into the background ; but the Hotel Bristol is conspicuous. If coming from the South, steer a compass course well clear of Beaulieu Point and look out for an iron standard at the extreme northern end of the East (stone) mole. This standard is painted grey, and exhibits a light. The western mole is low and very short. No yacht drawing more than 5 feet should enter, and even then the utmost caution should be taken ; the water soon shoals and the space is very restricted indeed. Having rounded the light on the East mole at a sufficient distance to avoid the stones, let go anchor a few yards inside but close to this mole, and just before you come abreast of a short jetty from the western side half-way up the harbour. Then haul stern as near the quay as the depth permits. A beautiful little harbour, and very pleasant except in easterly winds which send in a swell. At the innermost end are a slipway with cradle and yacht-builder's shed. During the daytime the rushing past of motor-buses somewhat disturbs the natural peacefulness. Excellent restaurants and shops. Oils from garage near harbour.

BEAULIEU



Monte Carlo (Monaco). Having passed the steep little peninsula of Monaco, at the edge of which stands the prominent modern stone building of a marine museum, you will find yourself in a wide bay with the two unusually solid breakwaters of the harbour coming into sight. The southernmost extends from the Monaco side, and the northernmost from Monte Carlo. To enter, steer between the two substantial lighthouses, then turn either to starboard or port. The usual berth for yachts is to starboard, and small craft go far into the corner, where both fresh water and petrol can be obtained, and a crane is available for lifting on to the quay yachts of (say) 12 tons for a scrub or painting. Let go anchor, and then haul stern to breakwater. The one wind which affects this delightful harbour is from the East, and a certain amount of swell is felt along the North breakwater. Therefore it is better for small yachts on entering to turn to port and go well in to the other side beyond any big moored vessels and almost till you reach the corner. Let go anchor, or run a bow line off to one of the vacant buoys, and then haul stern as near to breakwater as possible. This berth is perfectly snug and sheltered from any swell and all winds, with landing steps and water-taps adjacent; the only disadvantages being that it is somewhat near the gasworks, and that the depth of the harbour is considerable for small craft compelled to get up anchor by hand. In fine weather, when stopping only a night or two, secure fore and aft alongside the Quai de Commerce (on the Monaco side), towards the eastern end; but be prepared to haul ahead or astern if a small trading steamer should call. Bigger yachts sometimes berth at right angles to the Quai de Commerce, but half-way down, with anchor well out to the North and stern to the South. The disadvantage in that case arises when an easterly wind sends along a swell. At the extreme western end are moorings for small local yachts, but occasionally yachts of several hundred tons bring up here with bows to the East,

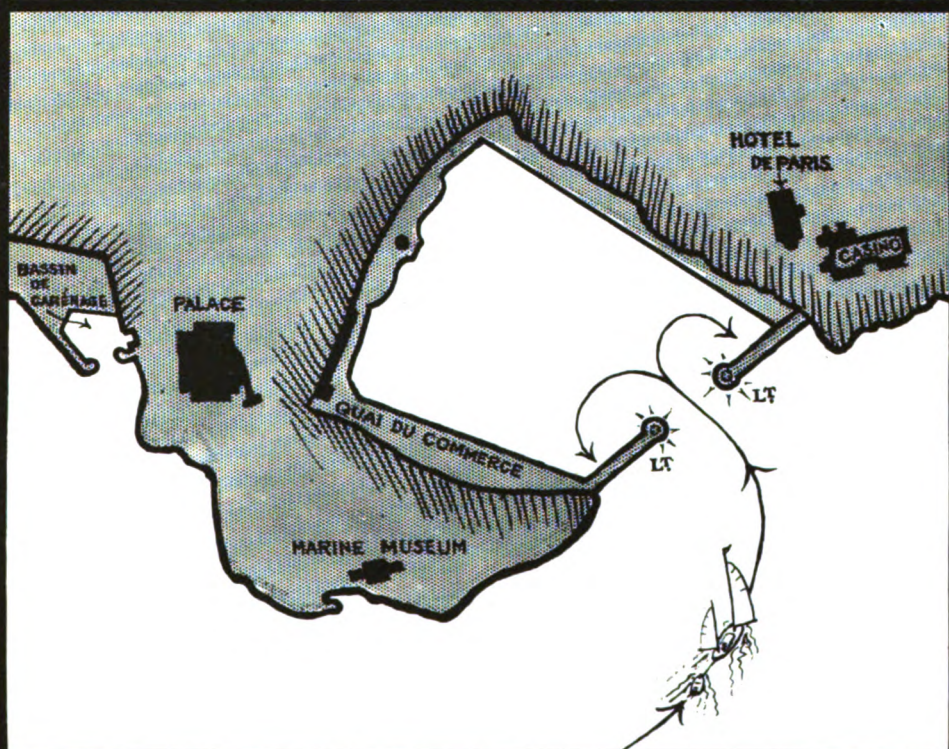
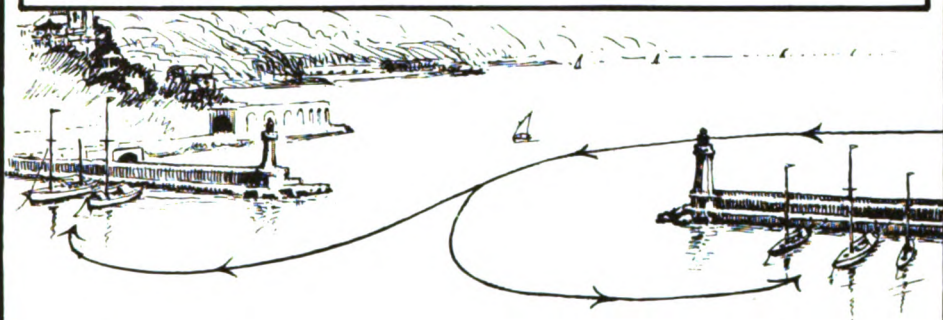
though they are still more exposed to easterly swell from that anchorage.

This harbour is clean, and the surroundings delightful. The Commandant and his assistant will be found courteous and helpful, the harbour office (to which yachts' letters are delivered) being on the South breakwater close to the lighthouse. It is customary to fill up, on arrival, a declaration giving particulars of yacht, ownership, where from, etc. But there are no vexatious regulations. Petrol can be obtained from the pump every morning (8 till 9) at the western end of the Quai de Commerce. Paraffin can be purchased about five minutes' walk away, by going up the road past the gasometer to a large ironmonger's, where you can obtain many yachting requisites.

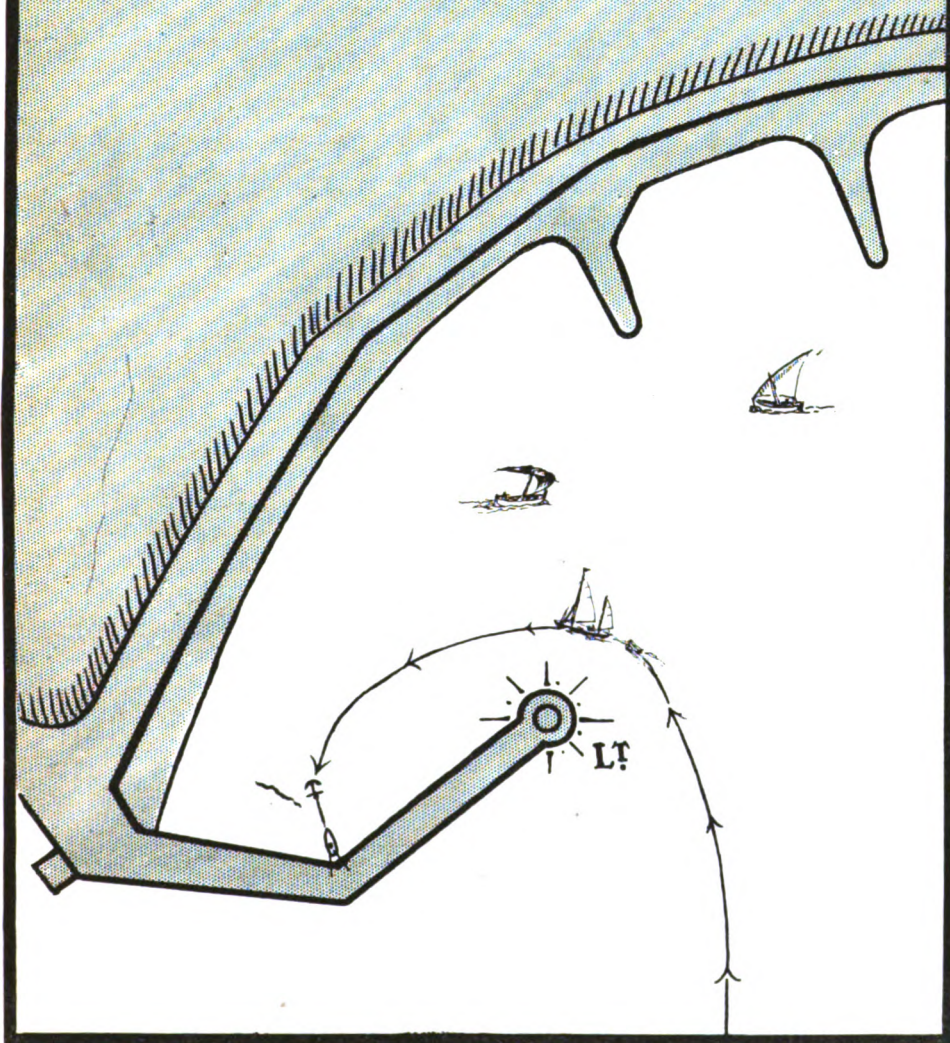
Outside the harbour, and immediately below the landward end of Monaco peninsula, is a tiny haven known as the Bassin de Carenage. Here will be found a slip with a yacht yard (Manzone) at the top. Both repairing and building of yachts are carried out: they can also be hauled out for the winter. Excellent hot baths are provided near the western front of Monaco harbour, just beyond the gasometer. Provisions can be obtained very reasonably from shops West of the harbour.

Menton harbour presents no difficulty when entering, and it is not likely to be crowded, though a number of fishing boats are usually at the quay. Having rounded the light at the breakwater's extremity, try and get a berth near that spot where this breakwater has an elbow or angle. The holding ground is good, but let go plenty of chain with anchor at right angles to the quay, and haul stern in with ropes to shore. This harbour is somewhat exposed should the wind come easterly, but you will then find the local fishermen shifting their ropes and you can haul off into safety. Some small yachts lying at moorings keep afloat throughout the winter in Menton harbour, though Monaco is far more comfortable.

MONTÉ CARLO



MENTON



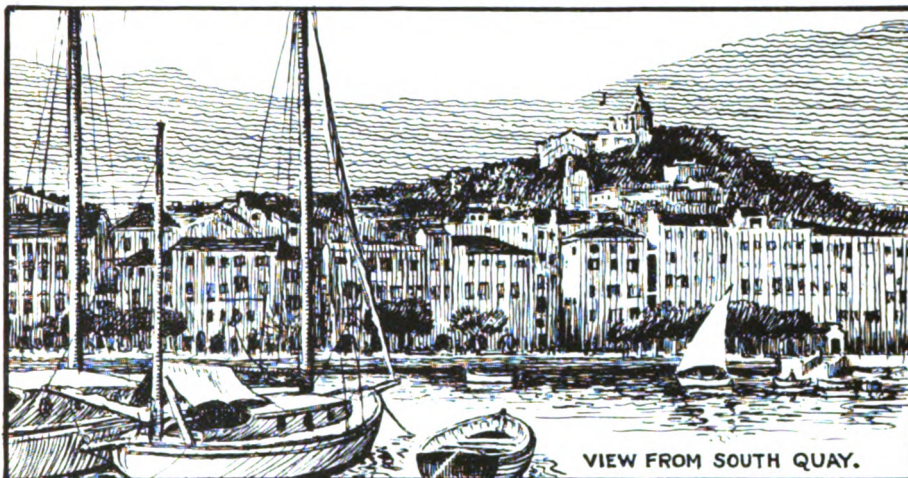
There are motor mechanics and many excellent shops at Menton, with plenty of restaurants convenient to the harbour.

San Remo. This is the first port after passing the frontier to Italy. Yachts eastward bound are advised to call on the Italian Consul before leaving Monaco and obtain a "Patente di Sanita." Until a very few years ago there was a certain amount of friction and unnecessary red-tape in Italian harbours when British yachts were concerned. Since 1935 conditions have become very different, and yachts receive courteous welcome. On reaching the first Italian harbour, go at once to the Capitano di Porto and give him the necessary particulars. The simplest method is to have several type-written copies of the following particulars: name of yacht, nationality, port of registry, net tonnage, measurements, horse power, make and speed of motor; names of proprietor, captain, crew, and passengers, with dates and where born. Such documents should be in duplicate, but one copy will be given back to the owner duly attested by the Capitano di Porto. It is only essential that this should be shown at successive ports of call, together with a statement if any changes have meanwhile been made as to passengers or crew. Passports of course are required.

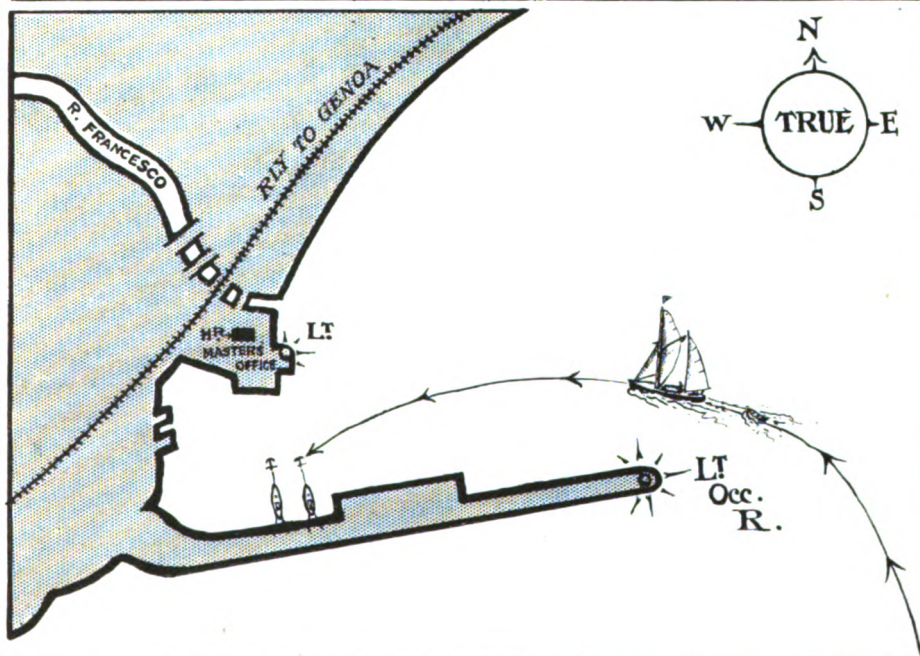
San Remo is well protected from prevailing South-westerly winds, but its shape is not unlike that of Menton and the port is equally exposed to easterlies. Mistrals also can make San Remo uncomfortable. The harbour is not easily discernible from seaward, but a compass course will bring you to the head of the southern breakwater, which has a light. Round this at a fair distance and proceed westward down the centre of the harbour. A good berth is immediately past that where the Government vedette boats bring up. Go towards the SW corner, let go anchor to the North-East, and run stern lines off to the southern quay. The Harbour Master's (Capitano di Porto) office is nearly opposite, and from there

a rowing boat with naval seamen will probably put off to your assistance as you arrive. It is advisable to let go a second anchor from forward if wind seems likely from the North or North-East. Apart from the above-mentioned motor vedettes, the harbour is chiefly used by yachts, local fishing craft, and small coasters. Drinking water can be obtained from this southern pier, but it is preferable to fill up from a tap on the northern shore West of the Harbour Master's office, being there of excellent quality and deliciously cold. Ropes, oils, and all kind of provisions can be obtained in the town, which has good shops. There is a café on the southern pier. Motor garages within a few minutes of the harbour.

Porto Maurizio will be easily recognised by the domes, cupola, and belfries, as well as a long row of arches that were once part of the Monastero di Santa Chiara. On the hilltop is the conspicuous cathedral. A long low-lying mole with a light-buoy at its seaward end comes out to the eastward. Giving this a clear berth, head up to the NW. Having left this southern mole to port, leave the next mole to starboard, when you will find yourself within the harbour, well protected from northerly winds. Alterations and improvements have taken place in recent years, and if SE winds are still the worst the swell can be avoided by choosing a spot in the NE corner. Having anchored, haul stern in towards the quay, where you will find shelter from all winds. There are ring-bolts here, landing steps, and the holding-ground is excellent, whilst the harbour itself is clean. Avoid mooring too near the sheds since trading steamers come here to load. The Harbour Master's office is just past the sheds. (Go through the gates and turn to the left.) Ropes can be purchased just outside the gates. Mount the steep road opposite to reach the town and chief shops. Dine at the Ristorante Italia in the Corso Dante. Hot public baths obtainable just below the last-mentioned street. At the harbour's extreme West



SAN REMO



end is a good slip for scrubbing a dinghy, where the local fishing boats are hauled ashore.

Oneglia, which adjoins Porto Maurizio, is less suited for trading vessels than for yachts. (The generic name for Porto Maurizio and Oneglia is Imperia.)

When sailing across the Gulf of Genoa, especially in small vessels, bear in mind that from Porto Maurizio to Genoa the area is scarcely less treacherous than the Gulf of Lions. In place of the Mistral there comes down over the mountains with little warning a violent wind from the North, but spreading fanwise between NNW and NNE, immediately raising a short hollow sea. Big yachts with plenty of length and weight and ample freeboard can often carry on, but even 80-ton schooners are compelled to reef. For apparently no reason, a fair wind will suddenly change to head wind at Capo delle Mele, off which the current sets westerly. Tartane skippers sometimes run for shelter to the NW corner of Gallinara Island, anchoring with a sandy bottom, but this is not too satisfactory. When passing through Genoa Gulf keep an eye on the mountains: if you observe a very clear sky with isolated soft clouds coming over, seaward, you may expect the *tramontana* to rush down from the Ligurian Alps after the manner of the French Mistral, though for a shorter period. With equal suddenness the *tramontana* may cease, and the wind fly round to SW. Off Gallinara Island I have experienced the wind being light SW at 10-30 a.m., but a hard NE *tramontana* from 11 a.m. until 2 p.m. when it was again blowing a gentle SW breeze.

During a summer's day off this littoral it may blow a fresh NE breeze from 2 a.m. till dawn, springing up quite quickly with an unpleasant sea. By sunrise it may begin to ease up and work round with the sun, so that by 6 a.m. there is a calm. During the forenoon a light air may come from E veering to ESE, so that by 1 p.m. (Summer Time) it is SE, an hour later

SSE, at 3 p.m. SSW, at 5 p.m. SW until sunset, when it has reached NW, and the wind dies till suddenly springing up at 2 a.m. These conditions are subject to variations, especially off the headlands, and are affected by the local mountains. Therefore, when proceeding from Porto Maurizio towards Savona and Genoa, too much caution cannot be paid to the weather.

NOTE ON ITALIAN PORTS. Working East and South, good harbours are found in **Savona** and **Genoa**. At the latter, moor in the Duca degli Abruzzi basin specially reserved for yachts, having obtained permission from the Royal Italian Yacht Club (Regio Yacht Club Italiano). **Portofino** is perhaps the most beautiful little harbour in the Mediterranean, but a heavy sea outside may send in a violent swell, in which case haul off from the quay. **Santa Margherita** is another lovely anchorage, but **Rapallo** is somewhat exposed. The entrance channel to **Viareggio** has much traffic, and its banks are encumbered with all sorts of craft. Turn to starboard into a darse, which communicates with a second darse used by sailing craft and generally quiet. There is a good harbour at **Leghorn**. The **Island of Capraia** affords a charming little port, the bottom is sand, but you need good anchors and plenty of chain. Safe, in spite of the hard gusts here experienced. **Gorgona Island** is to be avoided for political reasons. **Porto Ferrajo** on the **Island of Elba** is pretty, with a fairly crowded little harbour that is very dirty. Preferably anchor in the roadstead. The place has a good market, but the iron-works cause dust. **Porto Longone** on the island's South-East side is frequented by local tartanes, but exposed. Let go two anchors. From Elba yachts frequently sail across to Corsica and anchor in **Bastia** harbour. Tartanes run into **San Stefano** for shelter, but it is often very crowded. During winds from NW to NE it is impossible owing to a heavy sea, in which circumstance use **Baia di Talamone**. **Porto Ercole** is a picturesque little harbour but not good in SE winds. The sea

can be very rough between the islands of Giglio and Giannutri. **Civita Vecchia** lies within a long mole. Moor at the further end in the Darsena Vecchia, North of harbour entrance, with stern to quay and anchor ahead, though the best berth is under Michael Angelo's Tower. If entering the **River Tiber**, choose a flat calm since there will be barely 6 feet on the bar. **Port Anzio**, 26 miles from Civita Vecchia, is a nice little port patronised by coasting craft. Good for SW winds, but bad for SE and S winds, which send a big sea. Avoid **Ponza Island** for political reasons. At **Gaeta** anchor in the first little harbour, which is quiet and fairly clean. The roadstead North of Gaeta promontory is capacious and sheltered from practically all winds. **Porto d'Ischia** is rather crowded in summer. Anchor with stern to quay. **Porto Miseno** is a secure, natural harbour. **Baia** is charming. Anchor off the head of the short stone pier, or else moor to the pier. Note that you will often find the weather hazy off this coast because of Vesuvius. Generally during settled conditions the wind will begin at SE, be light at 9 a.m., gradually freshen and work round to West. At **Santa Lucia** the entrance is only 30 yards wide, and this small port (half a mile south of Naples' big harbour) is reserved solely for pleasure craft. Usually very crowded. Haul stern to quay. Should an agent be required, employ J. Luise. Neapolitan yachtsmen are very friendly, and the local Real Club Canottieri Italia is hospitable. **Port Sorrento**, though safe, is not too comfortable with winds from NW to S. **Capri** lies 16 miles South of Santa Lucia. Anchor in the small port on the island's North side alongside other yachts. During the summer NW winds prevail, beginning at 11 a.m. and continuing till 4.30 p.m. **Amalfi** is secure, but exposed to E and SE winds, which create swell and make the place little better than an open roadstead. At **Salerno** bring up inside the mole. From here there exists practically no shelter until reaching Sicily, and small yachts must be prepared to keep the sea during summer gales.

NOTE

THE greatest care has been taken in regard to providing the most accurate information under the above chapters, but no responsibility can be accepted for any mistakes or omissions which may have occurred therein. It would be much appreciated if a reader, who discovers any error, would be good enough to inform me so that alteration may be made in the next edition.

Acknowledgment is here made to the following, which have been consulted, in addition to the information obtained through personal channels : *Yachting Guide to the North East Coast*, issued by the Northumberland Yacht Club ; the Clyde Cruising Club's *Sailing Directions and Anchorages, West Coast of Scotland* ; the *Irish Cruising Club Sailing Directions* ; the publications of the Royal Cruising Club ; *Instructions Nautiques* ; the Admiralty charts, tide-tables, and sailing instructions ; the *Yachting Monthly* ; the *Motor Boat* ; Cowper's *Sailing Tours* (Part 5) ; Captain Leslie Richardson's *Motor Cruising in France* ; Charles Pears' *From the Thames to the Seine*.

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